

THE FIRST LABOUR GOVERNMENT  
AND NEW ZEALAND'S RECOVERY FROM DEPRESSION.

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## PREFACE.

The scope of this study of the New Zealand economy during the late 1930s has been delineated by two factors - the availability of statistical information, and the title of the thesis.

There is a lack of useful statistical information about the New Zealand economy in the 1930s. In particular, there are no figures available for the tertiary industries, including the wholesale and retail trade, and so a study of this sector of the economy, important though it is, has not been attempted. Similarly, the direction that each sector study takes differs from one sector to another, and was determined by what statistics were available for each particular sector. All the figures presented have been taken from the original sources quoted, except for the series for the volume of production, and the productivity, of secondary industry. Both of these were supplied by Mr. W. Rosenberg, the former being supplied to him by the Department of Statistics, and the latter being calculated by Mr. Rosenberg on the basis of the former series.

No sector studied in the course of this thesis has been studied in great detail, firstly because of the lack of available information, and secondly because an estimation of the effectiveness or otherwise of the Labour Government's policy for economic recovery does not require a highly detailed sector study. Similarly, no attempt has been made to find parallelisms between economic situations or policy in the '30s and the '60s, as this too would be irrelevant. It has been necessary, however, to extend the overall study back to about 1930, in order to get a suitable base year. Neither the end of 1935, (when the Labour Government came to power) nor 1932 (the trough of the depression) were suitable dates from which to start a study of economic recovery, in



that there would have been no indication of how complete recovery was.

The thesis has been presented in three sections - the narrative, supported by graphs, and by tables. The narrative comes first, followed by the graphs and tables in that order. Each section has been cross-referenced to the other two, and no difficulty should be experienced in moving freely from one section to another as required.

## INTRODUCTION

### S1. A Brief History of the Labour Party.<sup>(1)</sup>

In 1916, two existing political parties - the United Labour Party and the Social Democratic Party - amalgamated with the Labour Representation Committee, to form the Labour Party.

In the 1919 elections, despite opponents' claims that the Labour Party was "Bolshevist", it gained 25% of the votes cast, and in 1922 won 17 seats.

Throughout the '20s fluctuating economic conditions brought a certain amount of unemployment and a general worsening of conditions for employees; and for the employers lower production and profit levels. In the face of these conditions the Labour Party, under the leadership of H.E. Holland, identified itself with the employee, especially the out-of-work employee. Among its moves was the introduction of an unemployment bill in 1926, which was not accepted by Parliament, but which formed the basis of many of the unemployment measures of the early '30s.

In the 1928 general election, two of the major New Zealand political parties, the Labour Party and the United (ex-Liberal) Party, both campaigned with proposals for economic recovery. The United Party, with its Vogel-type borrowing policy, won the election.

In 1931 the United and Reform Parties amalgamated, and were elected to office as the Coalition Government. Many of the measures that they took to restore the economy will be mentioned in various parts of this thesis. By the time that the postponed general election was held in 1935, the country had lost faith in the Coalition Government, and on December 6th of that year the Labour Party, now under the leadership of M.J. Savage, was elected to office.

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(1) Based on Chapter VII of "The Quest for Security in New Zealand", by W.B. Sutch.

Sutch observes that:-

"They represented more than wage-workers; their followers included small farmers, the under-privileged generally, and the monetary reformers."<sup>(1)</sup>

He continues:-

"The Labour Party's programme included State control of currency and credit, guaranteed farm prices, a national health service as free as education, abolition of relief works and the provision of employment at a living wage, restoration of wage cuts, a statutory minimum wage, national superannuation, invalid pensions, fostering of secondary industries, and reduction of hours of work. Apart from guaranteed prices and the basic wage, the above planks had been included in the Labour party platform from 1919. Within a year of the general election, most of them had become law."<sup>(2)</sup>

Although the Labour Government took office on December 6th 1935, it did not pass any legislation till 1936. Hence nothing that happened to the New Zealand economy until late in 1936 can be attributed to Labour Party policy. Many numerical tables will be presented, to try to determine what was the effect of this policy. In some of these tables, the years end on December 31st; in others, on March 31st. The earliest that one could expect Labour policy to be reflected in these tables would be in the figures for the year ended 31st December, 1936, or 31st March, 1937.

## S2. Structural Limits to State Intervention.

New Zealand can be described as having a "Modern Mixed Economy". A modern mixed economy is one that has developed from pure capitalism towards pure socialism, but which is still basically capitalistic. Although elements of socialism can be traced in all known societies, the evolution of a modern mixed economy as a separate type has taken place since 1914.

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(1) P123, *abid.*

(2) PP123, 124, *abid*

State intervention into an economy can be of three types.<sup>(1)</sup>

1. State intervention by control, i.e. where the factors of production and their utilisation are both completely controlled by the state. This usually takes the form of a state monopoly.

2. State intervention by "prescription". Where the state does not have complete control over the factors of production and their utilisation, it may still be able to exercise some control over them by prescribing conditions of production, utilisation etc. The issuing of licences is a common means of prescription. Obviously, "prescription" does not give the state such complete control as does state control itself.

3. State intervention by "stimulation". In cases where the state has neither complete control nor prescriptive control, it may still be able to stimulate increased economic activity, or changed economic activity, by such measures as customs duty, tax exemptions, subsidies, free research facilities, protection from foreign competition, improved marketing facilities etc.

In a modern mixed economy, state intervention by control is of limited importance. Only where there is considerable public support for the creation of a monopoly can nationalisation proceed; and inherent in the concept of a modern mixed economy is the fact that such support is rarely given. Added to this, state monopolisation of only one sector in an otherwise unplanned economy is unlikely to result in greater efficiency in either that sector or the rest of the economy.<sup>(2)</sup> Hence not only is nationalisation generally unpopular with the populace of a modern mixed economy, it is also not highly favoured by the Governments of such States. Although the

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(1) There are, of course, many structural systems for defining the parts of an economy. This one probably originates from none of them, but it suits very well what is to follow.

(2) See "Comparative Economic Systems", 6th Edn. by W.N. Laucks; Part V, "British Socialism."

first Labour Government was probably more socialistically inclined than its predecessor, and was probably thought by its opponents to be even redder than it was, it had no intention of changing the basic structure of the New Zealand economy nor did anyone expect that it would. Hence state control as a means of bringing about economic reforms had to be of slight importance.

State intervention through prescription can be of two types - positive and negative. Positive prescription aims at getting something done, while negative prescription is intended to stop some injurious practice. Positive prescription is likely to be of more importance than negative prescription in the recovery of an economy from a slump.

Both prescription and stimulation suffer from the same defect, however, they do not exercise control so much as create a climate within which private enterprise must work. There is no way of telling how effective they will be, or whether they will be effective at all.

### S3. The Division of the Thesis.

This thesis will be in two parts. In the first part, the extent of the recovery of the economy will be studied. In the second, an attempt will be made to determine to what extent the Labour Government was responsible for this recovery, and to what extent other factors were responsible. In this second part, the economy will be divided into three classes of sectors - that in which the state exercised complete control, that in which the state intervened through prescription, and that in which it stimulated economic activity. Three qualifications have to be made, however.

Firstly, sectors have in the main been classified according to the type of state intervention which in fact took place, rather than according to the type of intervention that could in theory have taken place. For instance, there is no fundamental reason why industry could not have been subject to prescriptive intervention, and overseas trade to

stimulation. In fact, the reverse happened, and so industry has been classified with the sectors in which state intervention took the form of stimulation, and overseas trade with the sectors in which state intervention took the form of prescription.

Secondly, the division between control, prescription and stimulation is an arbitrary one, and this produces some awkwardness. For instance, money & banking, savings & investment can only be looked upon as subject to prescriptive intervention because of the nationalisation of the Reserve Bank, which is itself a case of intervention through control, although not treated as such here. Similarly, there are some parts of the savings and investment, money and banking, and prices and trade sectors which were not subject to prescriptive intervention despite the nationalisation of the Reserve Bank; but it seemed better to deal with these sectors under one heading, than to try and fragment them. A similar problem, concerning electricity production and supply, was resolved by dealing with it twice, once as a sector subject to state control, and again as a major secondary industry, subject to stimulative influence only. Despite these shortcomings, however, the three-classes-of-sector approach serves its purpose fairly well.

Thirdly, due to a lack of readily available information, an important sector of the economy, the wholesale and retail trades, and most tertiary industries, have not been dealt with.

PART I

## PART I

In this part the extent of the recovery of the economy will be studied, while in Part II the recovery of individual sectors will be studied, together with those parts of Labour Government policy that effected them. There are some Labour Government enactments that cannot be conveniently dealt with in Part II, however, and they will be included in this Part.

### CHAPTER I

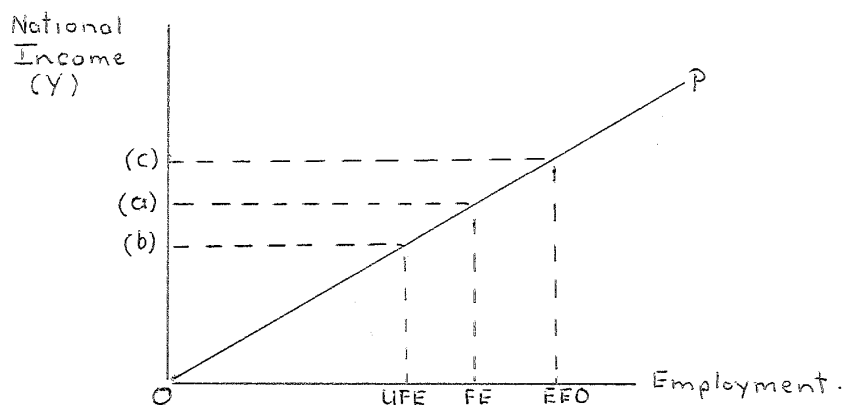
#### THE RECOVERY OF EMPLOYMENT.

##### S1. National Income and the Level of Employment.

A differentiation between money national income and real national income must be made. Money national income is the total of all goods produced and services rendered during a given period, usually of one year, valued at the prices of that year. Real national income is the total of all goods produced and services rendered during the same period, valued at the prices of some previous, base, year.

Real national income is the result of the combination of land labour and capital. In any but the long run, for real national income to rise, greater amounts of land, labour and capital must be used. Similarly, if less of these factors of production are used, real national income will fall. If it can be assumed that these three factors of production are used in constant proportions, and if it can be further assumed that land and capital are variable, at least in the middle run, and that there is no reason why, of themselves, they should be used in any particular quantities, then it must be possible, by adjusting the quantity of land and capital used, to change the level of employment, and at the same time change the level of real national income. In other words, the level of real national income will determine the level of employment. This can be shown graphically. (See next page.) The line OP represents all the different real national income/employment correlations in a given economy. If full employment (FE) is to be maintained, Y must





be kept at (a). If  $Y$  falls to (b), there will be under-full employment (UFE), and it will be necessary for  $Y$  to rise to restore full employment. If  $Y$  rises to (c), there will be excess-employment opportunities (EEO), and it will be necessary for  $Y$  to fall to restore the balance. If the full employment position should move to EEO, however,  $Y$  must rise to (c) to maintain full employment.

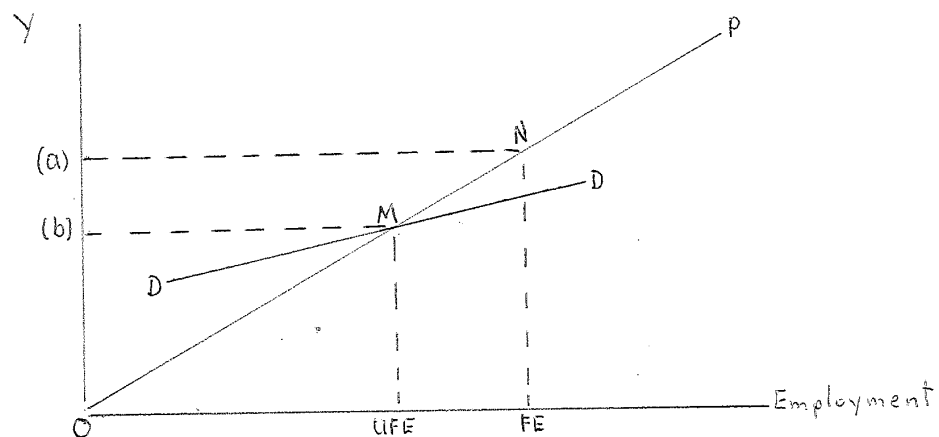
In practice, there is no way of telling where OP will lie. In fact, it is doubtful whether there is a single OP line, because there is no single land, labour and capital relationship that applies to a whole economy. In some sectors, a little land and/or capital may be combined with a lot of labour; in other sectors, with slightly less labour; in a third group of sectors with even less labour; and so on. For each possible combination of factors there would be an OP line. Hence, there would be not one OP line, but a large number of them, with no way of knowing which one would come into operation with a rise or fall in real national income, and hence no way of knowing how much the employment of labour would rise or fall following a given change in the level of real national income; or, alternatively, how much labour had contributed to a given rise or fall in the level of real national income.

It does seem reasonable to assume, however, that an increase in the use of land labour and capital will result in an increase in real national income, and that therefore, irrespective of which OP line is being followed, provided that line does not fall below the horizontal, (it seems unlikely to do so.), an

increase in real national income would suggest a rise in employment. The difficulty would be in measuring, *ex ante*, the amount of rise in employment for any given rise in real national income.

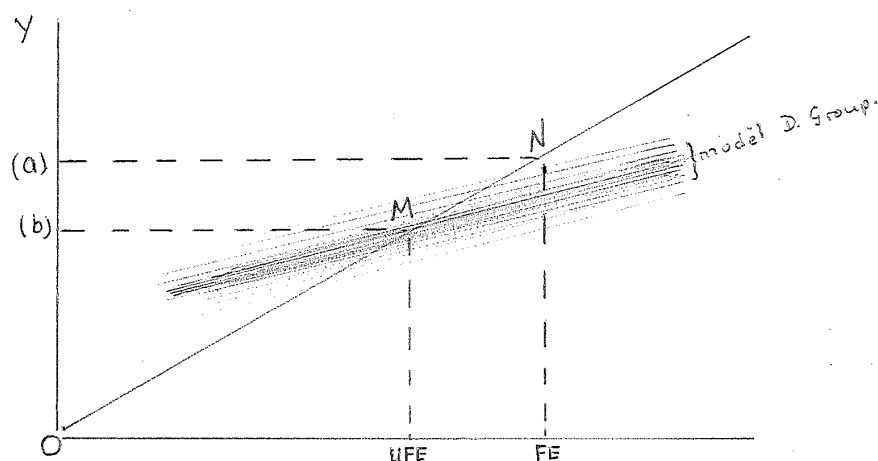
The quantity of land and capital used, however, is not an entirely independent variable. These factors of production have owners, who may or may not decide to utilize them in production. Their decisions whether or not to produce will be determined largely, though not necessarily solely, by the profitability of production: and the profitability of production will be deduced mainly, though again not necessarily solely, from the level of money national income.

Lord Keynes suggested that, due to the action of what he called the multiplier, an increase in investment will result in a correspondingly greater increase in money national income, till new savings equal new investment. This greater increase in money national income will result in a greater demand for existing goods, however, and in either an increase in profits, or an unsatisfied potential demand, or both. This is likely to make future production seem more profitable - the marginal efficiency of capital will rise, in Keynes's language. The probability that the multiplier is not constant, and that there are a number of multipliers, does not affect the validity of the basic theory. The result of this increase in either prices or consumer demand or both will probably be an increase in the demand by producers for the factors of production. The increased utilisation of the factors of production will result in an increase in real national income. This too can be shown graphically. To the previous graph must be added another line, labelled DD. (See next page). DD represents the aggregate demand of the community for goods; this demand being largely determined, as we have seen, by the level of money national income. In the case shown in this graph, the level of aggregate demand is such that, instead of producers being induced to produce a real national income of (a), and so provide full employment, a real national income of (b)



magnitude is being produced, and so employment is below the full employment level. Until the line DD rises to the point N on the OP line, there seems to be no reason why the level of real national income should ever rise to the level (a) necessary to provide full employment. And if the level of money national income is one of the major determinants of the position of the DD line, then this line is not likely to rise till money national income has risen.

This theory needs some refinement. It is doubtful whether all the demand curves of all the individuals in a community can be added to provide one single, national demand curve, as has been traditionally assumed in micro-economics. Instead, there is more likely to be a model group of demand curves, within which the majority of individual curves will lie. On either side of this band of demand curves will lie a lesser number of demand curves, thus:-



Although this modification may remove some of the definiteness from the theory, it still follows that if the model band of demand curves tends to lie over M rather than N, then real national income will tend to be at (b) rather than (a), and so employment will tend to be at UFE rather than FE. And it follows too that the band of demand curves is not likely to rise from M to N unless there is an increase in money national income.

This last statement needs further amplification. It has been assumed that the only consideration entering into the level of the demand curves is the levels of peoples' incomes. Other considerations may enter in, however; for instance, the marginal propensity to save may change following a change in income, and either accentuate the upwards or downwards movement of the DD curve, or reduce its movement. Again, tradition may tend to make movements of the demand curves lag behind the movement of money national income, while expectations as to the future may have the same or the opposite effect. But despite these qualifications, it still remains likely that a rise in money national income will result in a rise in aggregate demand, and a fall in money national income will result in a fall in aggregate demand.

In brief, the theory outlined in the preceeding pages is as follows:- an increase in real national income would indicate a rise of unforeseeable magnitude in the level of employment, and vice versa. The level of real national income is determined by the demand of the community for the goods and services that make up the real national income; and the major determiner of this demand is money national income.

Hence, in the economic upswing following a depression, one would expect to find a rise in money national income preceeding a rise in real national income; and if, during the period of reflation, the Government successfully interfered with the process of reflation, one would expect to see some unusual change in the movement of money national income, followed by a change in the movement of real national income. In the case of the Labour

Government in New Zealand, such interference would have no effect till the 1936-37 financial year. Unfortunately, there are no real national income figures published for New Zealand in the '30s. There is a published series of aggregate private income figures from 1932 onwards, however, which approximate very closely to money national income figures. (See G1 & T1). The lack of real national income figures can be partially overcome by adjusting the aggregate private income figures according to the retail price index. There is also a series of value-of-production figures available (see G2 & 3, and T1 & 2), which help to fill the gap.

The method whereby the real national income figures have been arrived at is set out in the footnotes to Table 1. The weak links in the method are the retail price index numbers themselves. There is no reason to believe that, as production fell and then rose again, it adhered strictly to the pattern of weights based on the 1926-30 average. At the same time, there is equally no reason to believe that a sudden, major change in the pattern of production took place; hence, although the real national income line drawn on G1 may not be strictly accurate, there is no reason to doubt its validity when it shows a clear change in direction, - only in marginal cases of change need there be any doubt.

G1 makes it quite clear that reflation started in 1933-4, although it was not till 1934-5 that money national income started to rise at a greater rate than real national income, as the previous theory suggested would happen. 1935 was not a good year, as will be noted in several places later. 1935-6 saw money national income rise at a rate faster than that of real national income, and in 1936-7, the first full year of Labour administration, both rose at an even greater rate. Money national income then increased at a slightly reduced rate till the end of the period, while the rate of increase of real national income fell considerably in 1937-8, and even more markedly in 1938-9. This leads to a conclusion that will be more fully

expounded later - that by some date in the first half of 1937, the economy had reached a short term limit to the expansion of real national income, and continued reflationary policies led to inflation.

G2, based on parts of T1, showing the volume of goods produced in New Zealand, suggests much the same sort of thing. The rate of increase fell in 1937, fell more in 1938, and became a slight rate of decrease in 1939. The value of goods produced followed approximately the same course. This would suggest that there was not much inflation in the goods producing sectors of the economy, and therefore that, if inflation did set in in the last years of the decade, it probably set in in the tertiary industries. Unfortunately, tertiary industries are a sector of the economy for which no figures are available.

## S2. Unemployment in New Zealand.

As can be seen from G6 and £3, male unemployment was high throughout the '30s. To get a true picture of the unemployment level, it must be remembered that workers on relief schemes, or being subsidised in their employment, are still unemployed. Hence, the level of unemployment is not the unshaded area in G6, but the total length of the bars. There is evidence in G6 and T3 of a seasonal element in unemployment.

On December 19th, 1936, unemployment, at 39,072, reached its lowest level since 1931, having fallen at the fastest rate since the trough of the depression. It seems reasonable to assume that the increase in the fall of unemployment was probably due to Labour Government action, and that the subsequent levelling off in the fall of unemployment occurred in spite of Labour Government action. The fact that there was a fairly constant level of unemployment after 1936 seems to reinforce the suggestion that the level of real national income did not rise much after early to mid 1937; while the fact that the constant level of unemployment was a fairly high one seems to

indicate that the level of real national income maintained in the late '30s was not sufficiently high to provide full employment, despite the continued growth of money national income.

It may be that the unemployment figures given in G6 and T3 are not accurate, in that many of those who were subsidised in their employment may have been able to hold down their jobs had there been no subsidy. There is no way of knowing whether this is correct or not. Purely on the basis of statistical evidence, it must be concluded that there was a rise in real national income and a fall in unemployment in 1936, and a fairly constant real national income, with an equally constant, high level of unemployment, from then on.

### S3. Labour Government Employment Policy.

The Labour Government's employment policy was similar in many respects to that of the Coalition Government. The latter had instituted numerous schemes whereby artificial employment was created for the unemployed. The most successful of these schemes was Scheme No.5, whereby local bodies could hire labour from the Unemployment Bureau for work that would not normally have been done by the local body. There was a minimum wage payable to the men, which was fully refunded to the employing body. At the same, the local authority was encouraged to make an additional wage payment to the men out of its own funds. The importance of Scheme No.5 can be seen from G6. Other major schemes included Scheme 6A, a Public Works camp scheme for single men; Schemes 5 special, 8A, 8B and 15, whereby gold prospectors were given financial assistance; Schemes No. 10 and 12, whereby the wages of builders and men engaged in building repairs were subsidised; and various schemes whereby developmental work and the eradication of noxious weeds on farms could be undertaken with subsidised labour.

The Labour Government allowed these and many other minor schemes to continue as long as there was any demand for them, and streamlined the administration of them by passing the

Employment Promotion Act, dated May 15th, 1936, the main provisions of which were as follows:-

SS 6, 7, and 15, required every person between the ages of 20 and 64 years inclusive, and who was not incapacitated, at university, or in a hospital or penal institution, etc., to register with a Postmaster, who would issue a certificate of registration. S8 made it illegal to employ any unregistered person who was required by the Act to register. SS10, 12, 16, 18, 20, 23, 28 & 29 laid down that registered persons were required to pay:-

1. A quarterly registration fee of 5/-; the first payment to be made on August 1st, 1936, and the others on the first of February, May and November.

2. An unemployment charge, except where the registered person was a woman or girl in private domestic service, or engaged on relief work. The charge was payable by the self employed as well as by the wage earners, and by women who earned over £50 p.a., at the rate of 1d per 2/6 of earnings; to be paid quarterly with the registration fee in the case of the self employed, while employees could have the amount deducted from their wages at source, or buy unemployment stamps.

S33 enacted that the money so paid should go to the Unemployment fund, now to be known as the "Employment Promotion Fund."

S35 states:- "The main purposes for which the Employment Promotion Fund has been established ... are the following:-

- (a) The development of primary and secondary industries in New Zealand, and the establishment of new industries, so that an increasing number of workers will be required for the efficient carrying on of such industries;

- (b) The making of arrangements with employers or prospective employers for the employment of persons who are out of employment;

- (c) The assistance ... of persons who are out of employment or are otherwise in need of assistance."



S36 gave the Minister the following powers:-

1. To ensure co-operation between local bodies and other institutions providing public or subsidiary relief work.
2. To assist, by grants or loans, the training of untrained persons.
3. To generally assist workers.
4. To make grants or loans to persons providing relief work.
5. To carry out investigations aimed at promoting labour absorbing industries.
6. To appoint voluntary local employment committees.

In fact, the purposes for which the Employment Promotion Fund was established are almost identical with the purposes for which the Unemployment Board and the Unemployment Fund were established by the 1930 Unemployment Act. The new act lasted only two years, until in 1938 it was repealed by the Social Security Act, though some of its functions continued to be carried on by the State Placement Bureau, which was also founded in 1936, and which in the next four years succeeded in finding 100,000 jobs for the unemployed; though some of these jobs were only seasonal.

With respect to the hours of labour and rates of pay, Labour Government policy was more positive. In the early '30s, rates of pay of most workers had been reduced. In 1936, the wage cuts were restored, and in the succeeding years some were increased. Many of the Acts of Parliament that brought this about will be studied in Part II.

At the same time that rates of pay were being restored, hours of labour were reduced, in most cases to 40 per week. The first measure would tend to increase money national income, and so aggregate demand, and so the level of real national income and employment. The second measure would tend to further increase the level of employment, by rationing the available amount of work among a greater number of workers.

Gs 7 & 8 and T4 show what in fact did happen. Although nominal weekly wage rates were reduced in the early '30s, effective weekly rates for males remained fairly constant,

while those for females were higher in 1936 than they had been in 1930. This would suggest that during the depression employers tended to reduce staff, rather than keep on staff at the reduced rates of pay. The industrial overtime and short time figures which shall be dealt with later, suggest the same thing.

It is probable that the years given in T4 ended on 31st December. <sup>(1)</sup> As far as male employees were concerned, Labour Government Policy was very effective in 1936, with both effective and nominal weekly wages rising sharply; a rate that was maintained by nominal weekly wage rates in 1937, while effective weekly wage rates rose at a lesser rate. After 1937, effective weekly wage rates declined. This movement is consistent with the hypothesis that after 1937 the economy did not absorb much more labour; falling wage rates are not usually consistent with increasing employment.

As far as female wage rates are concerned, the rise in the effective weekly wage rates in the early '30s is hard to explain. Because effective weekly wage rates were considerably above nominal weekly wage rates in 1936, however, it is understandable that weekly effective wage rates did not rise following the increase in weekly nominal wage rates, especially when two additional factors - that female labour was only a small part of the employed labour force, and that there was probably some hidden unemployment among women even as late as 1936 - are taken into account.

#### S4. The Mobility of Labour.

##### (1) International Mobility of Labour.

As can be seen from T5 and G9, during the depression there was net emigration, but in the year ended 31st March 1936, the net annual emigration figure fell to 1000. In the year ended 31/3/37, which was the year with the greatest rise in real and money national income, and also the year with the greatest fall in unemployment, there was a slight loss of population due to emigration. From then till 1940, people returned to New Zealand

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(1) This is usually the case when the Year Books give no indication of the end dates for each year.

at an increased rate, so that by 1940 New Zealand's population had risen by 13,377 due to the excess of immigrants over emigrants in the previous three years. It seems reasonable to assume that few old people would be caught up in this movement - most elderly people prefer to retire among friends - therefore the majority of these immigrants would probably be additions to the labour force. It may be that, had there not been this large inflow of people, the level of residual unemployment after 1936-37 may not have been so great, for although net immigration may have an inflationary rather than a deflationary effect <sup>(1)</sup> this is only in the long run, not in the short run.

(2) Internal mobility of Labour.

G10 and T6, and G11 and T7, show figures for the internal mobility of labour. G10 and T6 suggest that, over the period of the late thirties, there may have been some decline in the gradual movement of population from the South Island to the North, while G11 and T7, despite an obvious series of errors in the estimates of urban population, suggest that there may have been a gradual movement of population away from the country towards the towns - a movement which appears to have been accentuated in the late '30s. Neither of these movements seem to have been particularly violent, and in all probability are part of a secular movement, rather than due to depression being greater in the South Island, or on farms, or deflation being more advanced in the North Island, or in cities.

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(1) W. Rosenberg, "Full Employment. Can the Economic Miracle Last?"

CHAPTER II  
THE RECOVERY OF WELFARE

S1. Economic Welfare in New Zealand.

Economic welfare is a rather indefinable concept. Generally it has to be assumed that whatever increased people's material possessions, and their leisure, also increases their welfare.

Although it is possible to conceive of situations in which an increase in real national income would not lead to an increased welfare, there seems no reason to believe that the increase in real national income in New Zealand from 1933 onwards did other than raise the general national welfare.

There is no sure way of determining whether employees or employers benefited most from the increase in real national income. A comparison of the combined retail price index numbers (T62 and G88) and the effective weekly wage rates (T4 and Gs7'8) suggest that, on average, those who had jobs during the depression got more of the national product than they did in the late '20s, but that by 1936 they had been restored to about their original position. Due to the increase in employment in the late '30s, labour as a whole was probably better off than in the depth of the depression, especially when account is also taken of the reduction in working hours and the rise, at least initially, in effective weekly wage rates. At the same time, profits, and probably leisure, for the employer, also probably rose after 1933, and it is impossible to say which group gained most in economic welfare during the recovery from the depression.

Gs 12 to 18 and their corresponding tables give some further indication of a rise in general national welfare during the second half of the decade. G17 and T8 show a marked decline in the number of marriages till 1932, after which they rose steadily in number till 1935. The increase in 1936 may have been due to the psychological effect of a change of government, or merely to better economic conditions. The reversal to the previous rate of increase in 1937 was probably due to natural rather than economic conditions.

G15 and T9 show that there was also a decline in the number of births p.a. during the depression, with a long trough between 1933 and 1935. Although there is undoubtedly some correlation between the rate of marriages and the rate of births, the greater relative decline in births than in marriages suggests that many people who already were married could not afford to have children, and took care that they didn't. There was only a slight decline in the rate of increase of births after 1937.

One can only assume that the decline in the rate of deaths till 1933, and their subsequent rise, is due to non economic factors. The sudden excess of births over deaths in 1939 (G14 & T11) was due to a decline in deaths in 1939, again presumably for non economic reasons, rather than to an increase in births.

G18 and T12 show that after 1936, despite increased national income and rising prices, suicides, often looked upon as a good indicator of business, rose. This might indicate that after 1936 business expectations were not fulfilled.

Some of the graphs and tables to be dealt with in other places also give some indication of welfare. Gs 43 & 44 (T 24) show that the number of consumers of electricity increased at an increasing rate in 1937, and maintained this rate of increase, while the number of units generated per head of mean population increased at an increasing rate from 1936 onwards. There seems no reason to believe that an increase in the use of electricity, by an increasing number of people, would do other than increase welfare.

G26 and T32 show an increase in state expenditure on education and hospitals, especially after 1936, which can also be looked upon as an indication of increased welfare. At the same time, G80 and T59 show an increase in the level of bankruptcy in 1938 which, like the rise in suicides, suggests a fall in welfare.

In summary, there is little doubt that the welfare of the people of New Zealand increased after the trough of the depression,

in about 1932, until 1936. It is also probable that welfare continued to increase, till the end of the decade. What is not so certain is the rate of increase after 1936. The real national income figures, together with the bankruptcy and suicide figures, suggest that there may have been an increase in welfare at a diminished rate after 1936, while most of the other indicators that have been mentioned suggest that the pre-1936 rate of increase in welfare may have been maintained.

## S2. Labour Government Economic Welfare Policy.

In a sense, all Labour Government measures were welfare measures, in that they were intended to increase people's material possessions, reduce their hours of work or improve their conditions of living and employment. With only one exception, however, Labour Government policy was not designed to improve welfare by giving people a hand-out; rather, it was intended to put people in a position where they could help themselves. The restoration of welfare was to come about through the restoration of the economy.

The one exception was that part of Labour Government policy embodied in the Social Security Act of 1938, the principal provisions of which are as follows:-

The title to the Act states:-

"An Act to provide for the Payment of Superannuation Benefits and other Benefits to safeguard the people of New Zealand from Disabilities arising from Age, Sickness, Widowhood, Orphanhood, Unemployment or other Exceptional Conditions; to provide a system whereby Medical and Hospital Treatment will be made available to Persons requiring such Treatment; and, further, to provide such other Benefits as may be necessary to maintain and promote the Health and General Welfare of the Community."

The Act provides for Superannuation, Age Benefits, Family Benefits, Miner's Benefits, Temporary Incapacity Benefits, Unemployment Benefits, Medical, Pharmaceutical, Hospital and Maternity Benefits, as follows:-

(1) Superannuation Benefits.

Persons over 65 years of age, (II, S11) provided in most cases they had been resident in New Zealand for ten or more years, (II, S12) could receive a superannuation benefit. The first payment was to be made on the 1/4/40, and payments were to be made at the rate of £10 p.a., plus £5.10.0 p.a. for each year subsequent to 1/4/40, up to a maximum of £78 p.a. (II, S13).

(2) Age Benefits.

Persons aged 60 years and over could receive an age benefit provided, in most cases, they had been resident in New Zealand for 10 or more years. (II, S14). The rate was to be £78 p.a. When the recipient of an age benefit reached the age of 65, the superannuation benefit was to become part of the age benefit. (II, S16). The age benefit was subject to a means test, and was reducible £1 p.a. for every £1 of other income received over £52 p.a.; and by £1 p.a. for every £10 of accumulated capital value owned. Accumulated capital value was to be calculated as the total value of all property owned, less:

- (a) Any interest in land.
- (b) Any interest in an annuity or life assurance policy.
- (c) Furniture and personal effects.
- (d) £500.

(II, S20).

In the case of married recipients, the total joint accumulated capital was to be valued; (a), (b) and (c) above were to be deducted, and the result divided by 2. (II, S21). An additional benefit of £31 p.a. per child was payable.

(3) Widow's Benefits.

A widow's benefit was payable to widows with no children under 16 years of age at the rate of £52 p.a., reducible £1 p.a. for each £1 p.a. of other income over £52. In the case of widows with children under 16 years of age, a benefit of £65 p.a. was payable, plus £26 per child, up to a total of £234 p.a., reducible by £1 p.a. for each £1 that combined widow's and Children's incomes exceeded £78 p.a. (II, S23).

(4) Orphan's Benefits.

Orphan's benefits were payable at the rate of £39 p.a.,

reducible £1 p.a. for each £1 p.a. received from other sources by, or on behalf of, the orphan. (II, S27).

(5) Family Benefit.

Family benefit was payable to the father or mother of three or more children, provided the parents and children had been in New Zealand for one or more years, at the rate of 4/- per week per child between the ages of 2 years and 16 years; although if the child was still being educated, the benefit was payable till its eighteenth birthday. (II, SS28, 29, 20 & 66).

(6) Invalid's Benefits.

Invalid's benefits were payable to blind or permanently incapacitated persons. To married men they were payable at the rate of £78 p.a., plus £26 per wife and/or child, reducible £1 p.a. per £1 of combined family earnings over £78 p.a.; or, if the applicant was a wife, reducible at the rate of £1 p.a. for each £1 that combined family earnings exceeded £140 p.a.; in either case reducible a further £1 p.a. for each £10 of accumulated property, calculated as for family benefits. For unmarried men, the invalid's benefit was payable at the rate of £52 p.a., and in all other cases at the rate of £78 p.a., both reducible as above. In all cases there was a maximum payment of £208 p.a. An additional payment could be made in the case of a blind man engaged in some occupation. (II, SS33, 34).

(7) Miner's Benefits.

When a miner of at least 2½ years' standing, who has been in New Zealand for at least five years, was permanently incapacitated through some occupational hazard, he could receive £78 p.a., plus £26 p.a. per wife/child, to a maximum of £234 p.a., with the children's £26 p.a. being reducible £1 p.a. for each £1 family income exceeded £104 p.a. (II, SS39, 30, 41.)

(8) Temporary Incapacity Benefits.

After seven days of temporary incapacity, a person could, if under 20, and unmarried, receive 10/- per week. In all other cases the payment was £1 per week, plus 15/- for a wife, and 5/- per child, up to a maximum of £4 per week, or the normal weekly wages, whichever was the lesser. (II, SS46, 49).



## (9) Unemployment Benefits.

These operated at identical rates to the temporary incapacity benefits. (II, SS 52, 54.)

## (10) Medical Benefits.

The cost of consulting a general practitioner, but not a specialist, were to be subsidised, on terms to be determined by the Minister of Health.

## (11) Pharmaceutical Benefits.

Medicines, drugs etc. prescribed by a medical practitioner, were to be supplied on terms to be determined by the Minister of Health, by pharmacies willing to do so. (III, SS 89, 90).

## (12) Hospital Benefits.

Payment was to be made to Hospital Boards for the care of patients, out of the Social Security Fund. In some cases, similar payments were to be made to Private Hospitals. Maternity cases were also covered by the Hospital Benefits. (III, SS 92, 93, 96).

Other minor benefits were also established, such as Maori War Benefits, (II, SS 55-57) and Emergency Benefits (II, S58).

Part IV of the Act sets out the way in which the payment of these benefits was to be financed. As from the 1/4/39, a separate Public Account, called the Social Security Fund, was to be established. (IV, SS 102, 103). The Employment Promotion Fund as such was abolished, its balance being absorbed into the Social Security Fund. (IV, S104). Apart from fines imposed under the Act, and appropriations from other accounts, the Social Security Fund was to be financed:-

(a) by a registration fee of 5/- per quarter, payable by all men over 20 years of age;

(b) by a social security charge of 1d per 1/8 of income, to be paid quarterly on the first of February, May, August and November in the case of the self employed; and in the case of employees, payment to be made by source deductions by employers. (IV, SS 105, 107, 108, 110, 113, 118, 120).

There had been some social security benefits before the 1938 Act. These chiefly took the form of pensions, such as the old age pensions, war pensions, invalids' pensions etc. The pre-1938 system lacked the cohesion of the post-1938 scheme, and was not nearly of so great practical importance, as G19 & T13, and G20 & T14 show. Payments of a social security nature rose from £3,338,354 in 1936 to £6,780,344 in 1939, due mainly to the Labour Government's raising of Old Age Pensions to £52 p.a. as from 1/11/36, and £58 p.a. as from the 1/12/36; and invalid pensions to £1 per week, plus 10/- for a wife, and 10/- for each child, by the Pensions Amendment Act of 1936. Also in 1936, the War Pensions Amendment Act raised the pension of war widows with 1 child to 10/- per week, and allowed 2/6 per week for each further child; while the Family Allowances Amendment Act of 1936 widened the boundaries of recipients slightly. The Workers' Compensation Act of 1936 increased compensation payable in some cases, and altered the method of computation slightly. These measures succeeded in approximately doubling Social Security type payments before the 1938 Act doubled them again, this time not in four years, but in one.

The Social Security tax was slightly anti-egalitarian, being on a flat rather than on a graduated scale. It was more a form of compulsory saving than anything else. The distribution of these tax receipts again as benefits was more egalitarian, tending to favour the invalid, the impecunious, the aged and the parents of large families.

PART II

## PART II

### CHAPTER III

#### SECTORS IN WHICH STATE INTERVENTION TOOK THE FORM OF CONTROL.

This chapter will be divided into three sections. The first is a theory section. The second and third sections will cover Central Government and Local Government respectively. Although the control exercised over these latter is not as complete as that exercised by the state over its own departments, there is still a considerable degree of control exercised, partly through statutory control of many of the activities of Local Bodies, and partly due to the close political links that often exist between local and central government.

#### S1. Theory.

In Chapter I it was suggested that real national income determines the level of employment. Real national income, it was also suggested, is determined by the level of aggregate demand which in turn is determined, to a large extent, by the level of money national income. Money national income can be changed by changing the level of investment, due to the action of the multiplier. The multiplier will be discussed more fully later - in the meantime it will be taken for granted as being the reciprocal of the marginal propensity to save.

It is generally held that the private sectors of the economy are bound by the converse of Say's Law, namely, that while an increase in demand will stimulate production of the goods demanded, a prior increase in supply will not generate any corresponding increase in demand for these goods. This had already been noted in another form - real national income (supply) cannot rise unless aggregate demand rises. The principal determinant of aggregate demand is the current level of money national income. Hence, unless something happens to convince

people that the future is likely to be brighter than the current level of money national income suggests, it is unlikely that the private sectors of the economy will be willing to increase demand, production, the level of real national income, and so the level of employment.

The public sector of the economy, however, is governed by Say's Law: i.e., if the State decided to supply something, it can always provide the demand (finance) for it through taxation. Because of this, in a time of depression, the Government may be able to increase real national income and the level of employment without waiting for the level of money national income and aggregate demand to increase. There are at least two ways in which the Government may be able to do this.

In the first case, the Government may be able to raise the multiplier by lowering the marginal propensity of the community as a whole to consume. <sup>one</sup> Because the State can by design have no marginal propensity to save, if the State's part in the economy is increased, there is likely to be an overall lowering of the marginal propensity to save, and so an increase in the multiplier. The increase in the multiplier will be even greater if the State can increase its share in the economy at the expense of private savings rather than private consumption.

In the second case, the Government may be able to increase both real and money national income by following a policy of deficit State finances. Strictly speaking, a deficit cannot occur in the Public Accounts - the Government cannot spend more than it receives. If the Government spends more than it receives from the public in taxes and loans, it turns to the central bank and borrows. If the central bank is controlled by the State, it will not force trading banks to reduce their advances by the amount of the loan. Instead, the central bank will "create" the money - allow the Government to spend money that hitherto did not exist. These loans from the central bank may be used in two ways. They may act purely as an increase in the quantity of money, without any increase in the quantity of goods and services to be bought. Unless the marginal propensity to save rises, and absorbs

quickly this increase in the quantity of money (as it may do during the downswing of a depression), there will be an increase in prices and profits, and so in the level of money national income. On the other hand, these loans may be used by the Government to employ factors of production, including labour, and so increase real and money national income at the same time. Due to the inability of the State to provide for itself all the inputs of any venture it may undertake, it is unlikely that all of a loan could be used directly to increase real national income - there would be some additional increase in money national income as well, due to the rise in prices and profits caused by the additional demand exercised by the State for inputs that it could not provide for itself.

These two methods by which the State can bring about an increase in national income can be looked at in another way. As will be mentioned in more detail in a later chapter, for the level of national income to remain stable, savings and investment must be equal ex-ante as well as ex-post. If national income is to rise, then ex-ante investment must exceed savings. By reducing the overall multiplier figure, the Government will reduce total savings; while by following a policy of deficit finance, it will increase total investment.

## S2. The Central Government Sector.

Unfortunately, as far as New Zealand is concerned, it is almost impossible to tell whether a policy of deficit finance was pursued or not during the '30s, and especially the late '30s. This is because there are no statistics available showing total Government expenditure and revenue. As is stated on P448 of the 1942 New Zealand Year Book:-

"For a number of years up to and including the financial year 1937-8, a statement of income and expenditure, combining the revenue accounts of most Government Departments, and a State Balance Sheet, were published. For various reasons the preparation of these documents for years subsequent to 1937-8 have been discontinued until after the conclusion of the war."

A study of the few available statements show no items for loans from the Reserve Bank, despite the nationalisation of the Bank during the first year of Labour Administration. A glance at Reserve Bank Assets, (G54 & T46), however, shows that "other advances" rose from virtually nothing on 27/6/38 to nearly £20m. on 25/12/39. As will be mentioned in Chapter V, there is reason to believe that much of the increase consisted of advances to the Government. If this is so, the move was a belated one, or else its purpose was not to reflate the economy, for by 1938 the economy was virtually fully expanded, although, as already mentioned, there was still a high level of residual unemployment.

The other way in which it has been suggested that the State might influence the economy as a whole through the sector directly in its control is by increasing the size of that sector, in order to reduce the level of savings, and so both increase the multiplier, and make the existing level of investment more effective. In order to try and determine whether the Government sector did increase in relative size during the last half of the decade, the relative growth of Government income and expenditure, and the relative growth of Government employment, as compared with the overall growth of income and employment, will be studied.

Firstly, income and expenditure.

Government income comes from three sources: taxation, loans and commercial receipts. Although there are no figures available for the latter, and although there is no reason to believe that State commercial receipts would change at exactly the same rate as aggregate private income, there is also no reason to believe that they would change at a very different rate. Therefore the two forms of State income which are of most interest are taxation and loan receipts, and there are figures available for these.

G25 and T33 show the total amount of tax collected in New Zealand during the decade. From 1936 to 1940 the total tax collected rose by 62%, which is only insignificantly higher than

the 61% increase in aggregate private income (G1 & T1). The biggest increases came in income tax and social security (unemployment) tax. G27 shows the level of tax per head which, due to the population increase, rose less than did total tax.

G28 & T34 show gross national indebtedness, while G29 & T35 show the total new debt, and the purposes for which it was amassed. New net debt increased by 857% between 1936 and 1940. The increase in loan money was used principally for public works and the building of houses and, in the last two years, for the building of main highways. The big "other" item in 1940 is for war expenses, and in 1937 for the purchase of Reserve Bank shares. When gross new debt is added to total taxation, it is found that Government income from these two sources rose by 115% between 1936 and 1940; and even if 1940 is omitted on the grounds that war loans and tax distort the figures, the rate of increase is still 86%, as compared with the 49% increase in aggregate private income in the same three year period. On the basis of these figures, it would seem that the government sector did increase in importance in the economy in the last part of the decade.

As a means of financing the Government expenditure, loans and taxes both have their place. Although loans require a continuing interest payment, if they are raised internally this interest payment amounts to nothing more than a transfer payment. In a period of uncertain expectations, a Government loan may be able to call otherwise idle savings into use. Loans also have an advantage over taxation as a reflationary measure in that there is little danger of the former taking income that would have been spent on consumption anyway. At the same time, the public cannot normally be forced to take up a Government loan, and the taxable capacity of a country is almost certainly higher than the loan absorption capacity. From a reflationary policy point of view, both loans and taxes suffer from the disadvantage that they might take income that would have been invested anyway.

So far, Government income has been dealt with. Government expenditure is carried out through the various public accounts.



The consolidated fund, although it had by the late 1930's lost its position as the only public account of any note, still recorded over half of the expenditure of the Government. Between the years ended 31/3/36 and 31/3/40 the receipts and payments of the consolidated fund rose by 45% (G21 & T15). This increase is less than the four year rise in aggregate private income, although in the financial year ended 31/3/38 consolidated fund expenditure rose 16% over the previous year, compared with a rise of 10% in the level of aggregate private income.

The Public Works Account shows more growth in the late '30s than did the Consolidated Fund. Receipts reached their lowest point in 1933, and immediately started to rise again (G22 & T16). Between the years ended 31/3/36 and 31/3/40, Public Works account receipts rose 245%, as compared with the 61% increase in aggregate private income. The growing importance of the Public Works account among the Public Accounts can be seen from the fact that by 1940 the Public Works account was nearly 1/3 as large as the Consolidated Fund. G22 shows that virtually all the increase in Public Works Account receipts occurred in 1937 and 1939, with a fall in 1938, the year in which Consolidated Fund receipts exceeded aggregate private income in growth.

Consolidated Fund receipts are mainly taxes and fines. G23 shows that Public Works receipts were mainly loans, and that it was this item that fluctuated during the depression.

In many ways, G24 is more basic than G23; G24 represents the supply, and G23 the forced demand to pay for it. Two things should be noted from G24; firstly, the reduced relative importance of interest and departmental expenses during the reflation, or, conversely, the greater importance of items that represent actual production; and secondly, that although combined expenditure on roads and railways returned to approximately its 1929-30 level in the late '30s, expenditure on railways had become relatively more important at the expense of expenditure on roads, while several previously minor items, especially expenditure on departmental buildings and lands for settlement, had become of

increasing importance. Public works expenditure tended to take a new direction, at least temporarily, during the reflation.

The Public Works Department was one of the major employers of labour in the Government sector. Employment by the Public Works in 1937 rose by 77% compared with what it was in 1936. (See G34 & T17). After this there was a continued, though slight, rise in employment till 1939. Employment on the construction of roads rose relatively more than did employment on other works during the period 1937-39.

Public Works employment is not determined by desires to maximise profits, therefore it can act to some extent as a counter balance to seasonal unemployment in other sectors. In the late '30s in New Zealand it appears that Public Works did not do this - as G35 & T18 show, Public Works employment tended to fall in winter months, at the same time that other employment, especially in the farming and allied industries sector, could be expected to fall. Winter weather probably had something to do with this seasonal element in Public Works employment.

Public Works expenditure and employment on roads have already been mentioned. In fact, the Public Works, although it may have provided most of the labour for road building and construction, did not have to foot the bill for very much of it, as a comparison of G34 and G37 will show. The Main Highways Account, and Local Bodies bore most of the cost of road work. G37 and T19 show that after 1934 total expenditure on roading increased at an increasing rate, and that it was in the field of construction, especially the construction of main highways, rather than maintenance and interest charges, that this increase took place. This increase in construction was in part a return to the rate of construction that had existed at the beginning of the decade, and in part due to the need to catch up on construction that had been deferred during the downswing of the depression. Maintenance and interest and sinking fund charges, it will be noticed, and a stabilising effect throughout the decade.

To summarise Government activity as shown by the Consolidated Fund, the Public Works Fund and the cost of roading, there seems

to be confirmation of the conclusion reached in an earlier part of this section, namely that in the latter part of the decade there was an increase in the relative size of the Government sector, notwithstanding the slow rate of growth of the Consolidated Fund. This increase in relative importance was effected mainly through the Public Works Department. Further, many of the Public Works Department's enterprises being of a constructional nature, they may have stimulated increased production and employment in other sectors of the economy that supplied the necessary inputs.

The Government does not operate only through the Consolidated Fund and the Public Works Department, however. There are a number of other Government Departments of lesser importance than the Public Works Department, the more important of which will be looked at now.

G38 & T20 and G39 & T21 show State Forest Receipts and Payments, and the area planted on State Forests. Payments rose by 76% between 1936 and 1937; 25% between 1937 and 1938; 42% between 1938 and 1939; and 36% between 1939 and 1940; and by 1940, expenditure on State Forests had risen a total of 322% in four years. The State Forestry sector increased in size very greatly under Labour guidance, though its contribution to the total Government sector was small. Similarly, although the State Forestry deficit rose by 1324% in the four years, the rise was relatively too small to be considered as deficit finance. Although there are no employment figures available, the fact that State Forestry payments rose sharply after 1936, while the area planted annually in trees continued to fall, would suggest that extra labour was employed to catch up on deferred maintenance of State Forests.

The Post and Telegraph Department's receipts did not at any stage fall below expenditure, and the increase in both dated from 1935, and continued at a slightly increasing rate till 1939. (G40 & T22). Similarly, P. & T. Department employment rose in 1935, but this time the following increases were at a slightly decreasing rate, with temporary full time employees becoming of

some importance, and being the only evidence of any reflationary element in the Government's policy for the P. & T. Department. (G41 & T23).

Electric power in New Zealand is handled partly by the State, partly by Electric Power Boards, which are Local Bodies, and partly by the private sector. G47 & T26 show that the State's share of total revenue was small, and that from 1934 onwards State revenue rose at an increasing rate till 1938. G46 & T25 show Government capital outlay on electricity rose rapidly throughout the '30s, at a fast rate between 1936 and 1937, but no faster than was the rate between 1929 and 1930, and 1934 and 1935. There does not seem, then, to be any sign of a State reflationary policy after 1936 as far as electricity is concerned.

Apart from one or two very minor lines, the railways of New Zealand are State owned and operated. Mileage and load, operating revenue and expenditure, and total employment of the Railways Department all reached their trough of depression in 1933, and began to rise again almost immediately. (See Gs 49, 50 & 51; and Ts 28, 29 & 30). Passengers carried, train mileage and goods and livestock carried all rose a little more steeply between 1936 and 1938, which would suggest increased economic activity rather than any change in Government policy for the Railways Department. Employment also rose more steeply between 1936 and 1939, this time probably due to an increase in railway construction, which began in 1937 and continued at an increasing rate till 1939 (see G52 & T31), and which can be attributed to Government policy. The fall in value of capital construction in 1932 was not due to the destruction of lines, but to the writing down of the book value of railway assets by £10m. If the figures for operating expenditure and capital construction are added together, it will be seen that the total expenditure of the Railways Department rose by 21% between 1936 and 1940, as compared with the 61% increase in aggregate private income. This would suggest that the Railways Department lost importance as a sector, but at the same time it must be remembered that this Department would

require considerable inputs from the private sector of the economy and the small increase in railway expenditure may have stimulated increased activity in the private sector.

The Social Security Department has already been dealt with. As line 4 of G26 (T33) shows, the expenditure on social security, (pre-1939 = pensions) rose much more rapidly than did aggregate private income, even before the 1938 Social Security Act was passed. The other items of expenditure shown on G26 represent appropriations from the Consolidated Fund, and so have already been dealt with. All but Defence have also been dealt with in Chapter II.

These minor parts of the Government sector are not likely to have affected the size of the Government sector greatly one way or the other, and the conclusion remains that the Government Sector probably did increase in relative size in the last part of the decade. At the same time, there is no evidence of any very great increase in the relative size of the Government sector. To the extent that the Government sector did become more important, it may have been directly responsible for some of the slight increase in economic activity after 1936, through a reduction of the national multiplier, and an increase in production. In fact, the Government sector of the economy may have been responsible for most of the increase in real national income after 1937, for, as shall be seen later, there is strong evidence to support a theory that the private sector added very little to the national product in the last years of the decade.

### S3. The Local Government Sector.

Local Government receipts and payments are shown in Gs 32 & 33, and Ts 36 & 37. It will be noted that the trough of the depression in Local Government finances occurred at least a year after the trough in Central Government income and expenditure. It can be noted, too, that Local Government finances were much more stable than Central Government finances. This may be because a greater proportion of Local Body expenditure is on administration and maintenance - although there are no figures

to support this contention. From G32 it can be seen that the most variation in revenue occurred in "Public Utilities, Licences, Rents etc.", while most variation in expenditure occurred in "Public Works Construction and Maintenance."

It is not possible for Local Government to indulge in deficit finance in the same way as can the Central Government, therefore it must be assumed that the small deficits in 1931, -2, -3, -5, -8 & -9 were financed out of reserves; unlike the Central Government, Local Bodies do exercise a propensity to save. Due to this fact, it does not necessarily follow that it is a good thing for the Local Government sector to increase in size during a period of deflation.

Between 1936 and 1939 Local Body expenditure increased at an increasing rate. There is not, however, sufficient difference between the rate of growth in the pre-1936 figures and the post-1936 figures to be able to say that anything that happened after 1936 was due to a change of policy.

G30 and T38 show total Local Body debt. Gross debt and net debt were at a maximum in 1931, and then fell slightly each year till 1938, with gross debt falling faster than net debt, due to the decrease in sinking funds. After 1938, gross and net debt rose slightly. The fall in sinking funds, although not as great as the total fall in gross debt, would suggest that the fall in gross debt was probably due to mainly the maturing of existing debt, while the increase after 1938 would represent new investment. This new investment came so late in the decade that there is no reason to suppose it was due to anything but the increased demand for public utilities that naturally arises in a time of relative economic prosperity. The annual loan charge (G31 & T38) followed a pattern similar to that of Gross Total Debt, apart from the fall in 1934, which may have been due to the Mortgagees' Rehabilitation Act.

Compared with the Central Government sector, the Local Bodies Sector was of little importance in the economy, and over-all probably had a slight stabilising effect during both the downswing and the upswing of economic activity. During the first two years of

Labour Government, Local Bodies may have had a slight deflationary effect, in that they did not expand as fast as the rest of the economy, and Local Body dis-investment continued till 1938.

# CHAPTER IV.

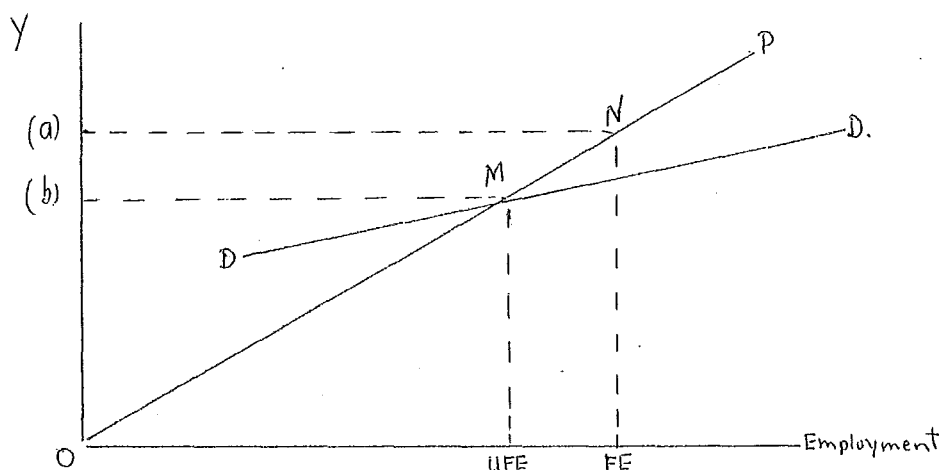
## SECTORS IN WHICH STATE INTERVENTION TOOK THE FORM OF PRESCRIPTION.

### S1. Introduction.

In this and succeeding chapters, money and banking, savings and investment, and prices and trade will be studied. Although in some cases some parts of these sectors were not subject to Government prescription, they have been included in this section either because it would have been permissible for the Government of a Modern Mixed Economy to have prescribed conditions for these sectors, or because they naturally belonged with other economic phenomena which were subject to Government prescription.

In past chapters a theory has been outlined concerning the levels of real and money national income, and employment, with the equality of savings and investment, and the multiplier, being mentioned in passing. In this chapter the theory will be amplified and explained. In this theory, a period analysis has not been used for two reasons. Firstly, there is no reason to suppose that in reality the periods for each individual bit of income and investment would exactly coincide, hence the period analysis would be quite useless when looking at statistics; and secondly, even if the period analysis was applicable, it is doubtful whether the periods would be of a year's duration, which is the time between each figure in the series used.

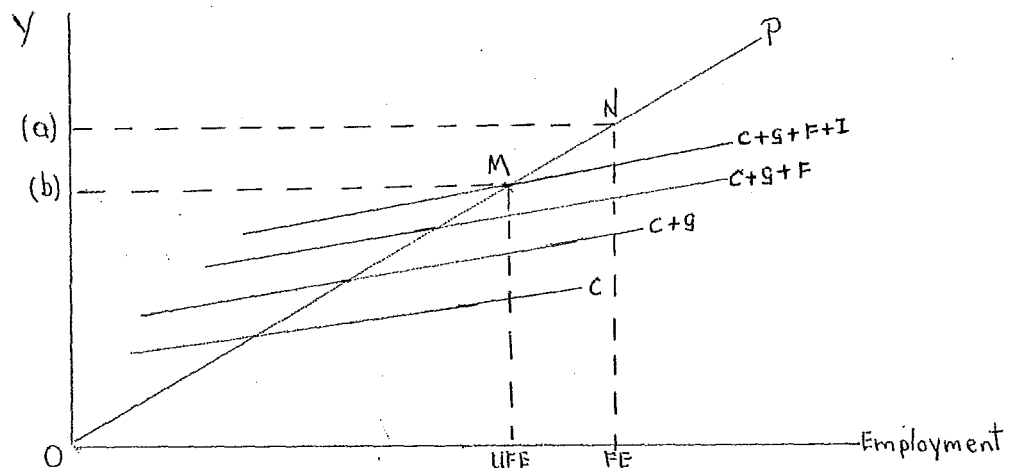
In Chapter I, this graph was drawn:-





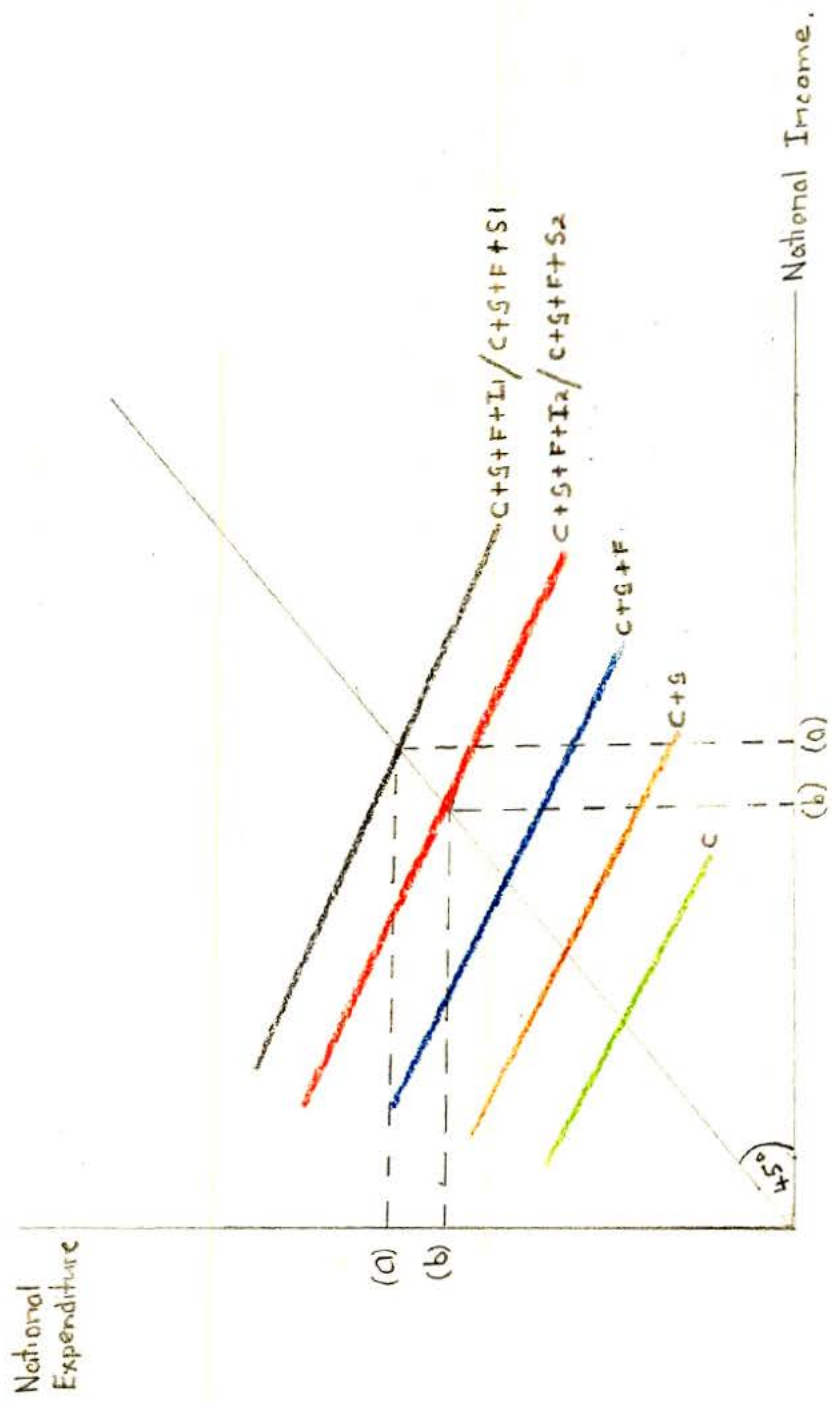
OP represents the correlation between real national income and employment. For the time being, it will be assumed that real and money national income are the same. DD represents aggregate demand, which sets the level of national income and employment.

Aggregate demand is made up of at least four elements - consumer demand, government demand, foreign demand, and investment demand. Hence, the graph can be redrawn thus:-



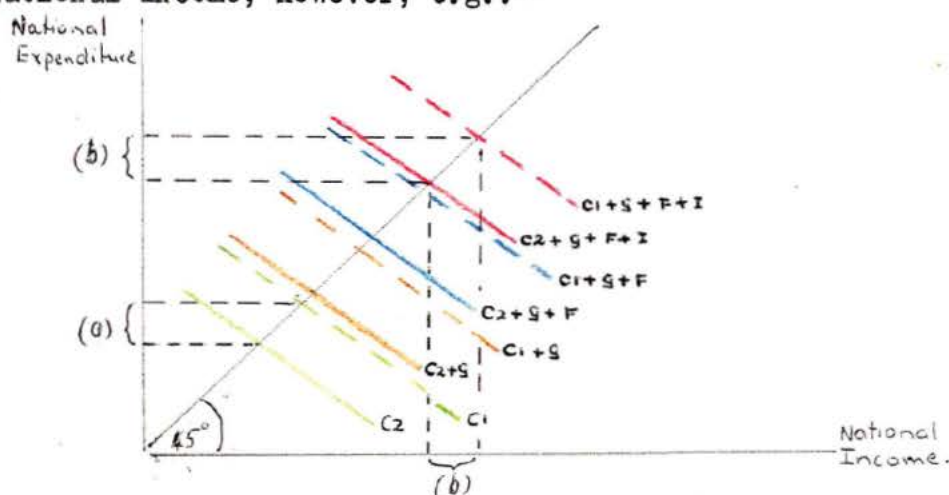
Government demand has already been dealt with, and foreign demand will be dealt with in a later chapter. For the moment, consumer demand and investment demand will be concentrated on.

Investment demand is different from any other sort of demand, in that, whereas the other types of demand are exercised by people using their own money, investment demand is almost always exercised by people who intend to use someone else's money. The number of investors is usually small, whereas the number of savers, who provide the money for investment, is usually very great. It is unlikely that in any period the amount of money available for investment (savings) would exactly equal the demand for this money (investment). This ex-ante inequality of savings and investment may cause a fluctuation in the level of national income, and so in employment. Although this could be shown on the above graph, it is more easily shown on the one drawn on the next page. In this graph, national income will equal national expenditure as long as savers abide by  $C+G+F+S_1$ , and investors abide by  $C+G+F+I_1$ . If, however, investors demand drops to  $I_2$ , then aggregate demand will fall to  $C+G+F+I_2$ , and



national income and expenditure will fall from (a) to (b). At this level of national income, savings will have fallen to  $S_2$ , where they will be equal to investment. This reconciliation of savings and investment "ex-post" when they were not equal "ex-ante" has caused a fall in national income which, if (a) was the full employment level of national income, has caused a fall in employment. Similarly, if both savers and investors were abiding by  $C+G+F+I_2/C+G+F+S_2$ , and investors then rise to  $C+G+F+I_1$ , national income will rise as savers move up to  $C+G+F+S_1$ .

So far it has been assumed that investment will be the prime mover. A movement in savings will also cause a fluctuation in national income, however, e.g.:-



In this case, if savers reduce consumption to  $C_2$ , their savings will be increased by the amount (a). Due to the loss of consumption demand, however, aggregate demand will fall from  $C_1+G+F+I$  to  $C_2+G+F+I$ . This will cause national income and expenditure to fall by the amount (b), which, being equal to (a), will cancel out the additional savings, and make savings equal to investment at that level of income.

There are, then, two sets of variables that can affect the level of national income, and so employment - those associated with consumer demand, and those associated with investment.

## S2. Consumption.

### A. The Marginal Propensities.

In this analysis, consumption means all expenditure, except that upon investment.

A person can do one of three things with his income - he may spend all of it, he may save all of it, or he may spend part and save part. The most common case is the latter. Income can be divided into two parts - that part which is consumed, and that part which is saved. At any given level of personal income, that proportion of any small addition to income that is saved can be said to show the "marginal propensity to save", and that proportion which is consumed can be said to show the "marginal propensity to consume." Together, the two marginal propensities will account for the whole of the small increase in income. The marginal propensities will not be the same at all levels of income, however. In poor societies the marginal propensity to consume will be high, while the marginal propensity to save will be low. The more developed a society becomes, the higher will be the proportion of each increase in income that will be saved, and the lower will be the proportion that will be consumed. At the same time, in times of economic uncertainty the marginal propensity to save is likely to rise, while the marginal propensity to consume will probably fall.

Consumption can be divided into two parts - that part which represents necessities, and which will be spent in order to maintain life and the current standard of living; the other part of consumption is non-essential, and may be postponed, in which case it adds to that part of personal income that is saved. Postponed, non-essential consumption does not account for the total level of savings, however. Many people, and more important, most businesses, tend to have an essential level of savings, in the same way as they have an essential level of consumption. The desire to make provision for possible future need, savings for a specific costly commodity, greed, aggrandisement, power and sheer puritanism are the probable reasons for savings.

#### B. The Multiplier.

So far, it has been suggested that when national income is increased, some of the initial increase in national income will

be consumed, and some saved. That part of the new national income that is consumed will become income for someone else, and so again, some will be consumed, and some saved. This process will continue until all the initial increase in national income has been saved. By the time that this has happened, a considerable increase in consumption, and so in national income, will have taken place. National income will have risen, not by the initial increase in national income, but by the initial increase multiplied by the converse of the marginal propensity to save. The converse of the marginal propensity to save is called the multiplier. The higher the marginal propensity to save, then the lower will be the multiplier, and so the smaller will be the cumulative effect of any initial increase in national income. Similarly, the smaller the marginal propensity to save, the higher will be the multiplier, and so the greater will be the cumulative effect of any initial increase in national income. Conversely, a low marginal propensity to save will mean that a small initial decrease in national income will cause a large cumulative decrease in national income, and vice versa. If the Government of a country is following a reflationary policy, that policy is more likely to be successful if there is a high national multiplier.

It is not at all certain that the concept of a national multiplier is a valid one, however. It has already been pointed out that there is not likely to be one aggregate demand curve, but a model group of demand curves. For the same reasons it is doubtful whether a theory of a national marginal propensity to save curve, consisting of the sum of everyone's own individual marginal propensity to save curve, is valid. Instead it seems more likely that there is a model group of marginal propensity to save curves, within which most of the individual curves will lie. This does not alter the validity of the basic theory that an initial increase in national income will have a greater cumulative effect, depending for extent upon whether there is a tendency for savings to be high or low; it merely removes an element of arithmetic preciseness from the theory.

### S3. Investment.

#### A. Liquidity Preference and the Rate of Interest.

"Liquidity preference" is the term given to people's and business's desires to hold liquid assets, principally cash. The desire for liquidity is made up of a demand for money to meet current obligations and, more important, a demand for money to meet specific and unknown future obligations. The rate of interest is the price that people are willing to pay for money in order to maintain their desired degree of liquidity. Hence anything that reduces current monetary obligations, removes fears as to the future, and increases the quantity of money, will tend to lower the rate of interest, and vice versa.

#### B. The Marginal Efficiency of Capital, and Investment.

Investment is "The present provision for future consumption." (Keynes). It may consist of new construction, new producer's durable goods, a change in business inventories, and net foreign investment. Gross investment is the total amount spent on these four classes of investment. Net investment is gross investment less replacement investment.

Post Keynesian theory tends to look upon the level of investment as being determined by expectations. The investor is interested in the "marginal efficiency" of his capital - the rate of yield of his capital, not at the present, but in the future. The marginal efficiency of capital can be said to be the estimated amount by which the estimated return from an investment will exceed the estimated rate of interest on riskless securities, plus the loss of interest through possibly having to wait for the return. Although the marginal efficiency of capital will be arrived at in a partly subjective manner, the main guide that the potential investor has upon which to base his expectations is the current level of economic activity, and profitability of investment. Anything that increases the marginal efficiency of capital, or reduces the rate of interest, will tend to increase the total amount of investment, by widening the margin between expected yields on riskless and other investment.

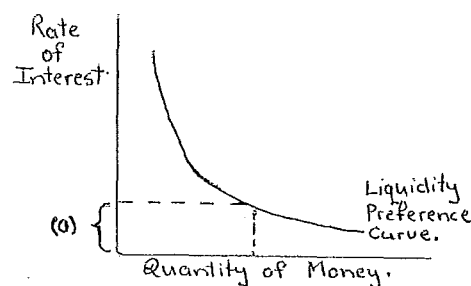
### C. The Accelerator.

The accelerator theory is based on the longevity of producer's goods, and their consequent high initial cost. The assumption is that in the short run the capital equipment necessary to meet increased consumers' demand will have a greater value than the actual consumers' goods produced. The accelerator is the converse of the figure arrived at when the increased consumers' goods' value for one year is divided by the cost of the machinery necessary to produce those goods, e.g. if an increased consumers' demand of £100 caused £400 of investment in producer's goods, the accelerator would be 4.

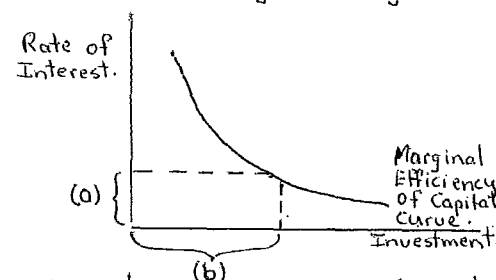
### S4. The Theory.

Sufficient tools have now been presented in order to fashion a theory of consumption and investment demand.

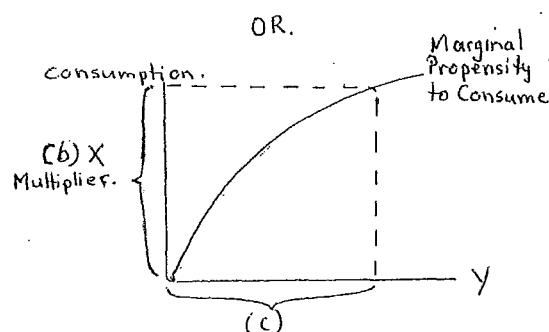
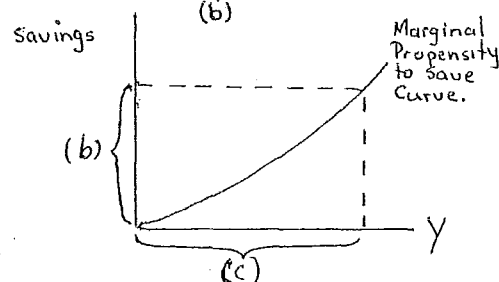
(a) The rate of interest will be determined by the liquidity preference of the people, and the quantity of money in circulation. (See S3A).



(b) This rate of interest will, together with the marginal efficiency of capital, determine the level of investment. (See S3B).

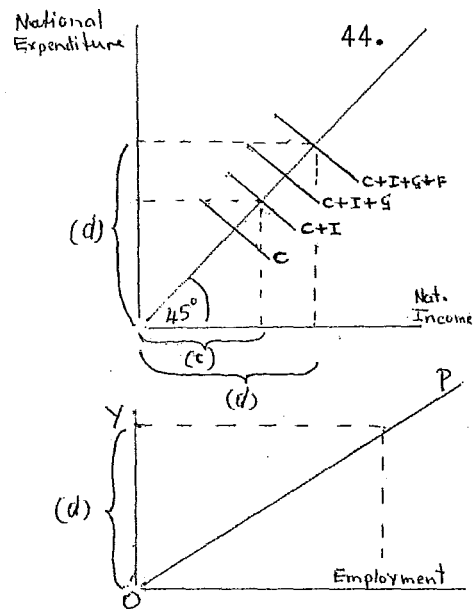


(c) Ex-post, the amount of savings will equal the amount of investment, and will be determined by investment. Therefore, with a given level of savings, the level of national income will be determined by the marginal propensities to save and consume. (S2, A&B).



(d) The amount of national income generated by consumption and investment can then be added to national income generated by government and foreign demand, to give the total level of national income generated by aggregate demand.

(e) This level of national income will determine the level of employment.



It will be seen that there are a large number of variables in this model. They are:-

1. The liquidity preference.
2. The quantity of money in circulation.
3. The rate of interest.
4. The marginal efficiency of capital.
5. The level of investment.
6. The marginal propensities to save and consume.
7. The level of savings and consumption.
8. The level of national income.
9. The employment/national income correlation.
10. The level of employment.

The liquidity preference, the marginal efficiency of capital, the marginal propensities to save and consume, and the national income/employment correlation are all beyond the power of the state to alter except possibly by propaganda, all but the latter being subjective. The level of employment, the level of national income, of savings, investment and consumption, are all determined by other variables. This leaves the quantity of money in circulation as the only true variable within the power of the State to alter. The State can, however, offer securities at any rate of interest it likes, not necessarily at the natural rate of interest. Hence, in addition to studying the quantity of money in circulation, the rate of interest will also be studied. In addition, the available savings and investment figures will also be



studied, to try and assess the success of Government prescription through control of the quantity of money in circulation.

So far, it has been assumed that real and money income are the same. For any one year, both national income figures will be the same; but over a period of years, changes in price levels will destroy this equality. Because people exercising demand are probably more influenced by money national income than real national income, a faster rise in money national income than in real national income would tend to work through the multiplier and the accelerator to increase demand for consumers' and producers' goods at a faster rate than would have been the case had prices remained constant. Prices too, then, will be studied. Although there was little or no prescription of price levels in New Zealand in the late '30s, prices are included in this section, firstly because they naturally belong here, and secondly, because in a Modern Mixed economy it would have been permissible for the Government to have prescribed maximum prices on essential commodities.

CHAPTER VSECTORS IN WHICH STATE INTERVENTION TOOK THE FORM OF INTERVENTIONCONTINUEDTHE QUANTITY OF MONEYS1. The Quantity of Money in Circulation.A. The Reserve Bank of New Zealand.

By the terms of the Reserve Bank Amendment Act of 1936, the shares of the Reserve Bank were cancelled, with shareholders being given the choice of receiving either £6.5.0 worth of Government stock per share, or £6.5.0 in cash. (S2). Any payments necessitated by S2 were to be made by the Reserve Bank, which would be reimbursed by the Government. The Reserve Bank was to make a book entry, transferring the entire nominal capital of £55,000 to a general reserve fund. (S3). The Board of Governors, which had previously controlled the Bank, was to be replaced over a period of time by Government appointees. (SS 6 & 7).

S10 set out the functions of the re-constituted Reserve Bank, and is quoted in full:-

"It shall be the general functions of the Reserve Bank, within the limits of its powers, to give effect as far as may be to the monetary policy of the Government, as communicated to it from time to time by the Minister of Finance. For this purpose, and to the end that the economic and social welfare of New Zealand may be promoted and maintained, the Bank shall regulate and control credit and currency in New Zealand, the transfer of moneys to or from New Zealand, and the disposal of moneys that are derived from the sale of any New Zealand products and for the time being held overseas."

The Bank was also given power to make loans on overdraft to the Government or the Producer Boards, to purchase and market New Zealand produce overseas; and certain previous restrictions on advances to the Government were lifted. (SS 12 & 15).

In order to enable the Bank to carry on its functions,

the monthly returns, which were already required to be furnished by the trading banks to the Reserve Bank, were more closely defined.

B. The Quantity of Money in Circulation. (1)

The quantity of money in circulation in New Zealand is made up of:-

1. Coin in circulation. This constitutes so small a part of the total money in circulation that it has been omitted from statistics that will be presented here.

2. Net note circulation - the total value of all notes issued by the Reserve Bank, minus those held by the trading banks as part of their reserves.

3. New Zealand demand liabilities of the trading banks, which consist chiefly of customer's cheque account deposits.

4. The New Zealand demand liabilities of the Reserve Bank, excluding those due to trading banks. These consist of deposits by the Government, and such concerns as the Government Marketing Boards, the State Advances Corporation etc.

It will be realised that this is a very arbitrary definition of the quantity of money in circulation - there will be demand liabilities of the trading banks included, for instance, that will be less liquid than some time deposits, or than P.O.S.B. account deposits. At the same time, because the quantity of money in circulation is defined arbitrarily, it will be consistent from year to year. Hence although it may not be true to say that the quantity of money was £37,711,267 on 31/12/34, it is true to say that if the quantity of money was £37,711,267 on the 31/12/34, then it would have grown to £45,336,964 by 24/6/35. And seeing that it is not in the absolute quantity of money in circulation that economic planners are interested, but in changes in that quantity of money over a period of time, the quantity of money figures as arrived at above, although arbitrary, are useful as a guide to policy.

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(1) See P31 of "Monetary and Fiscal Policy in New Zealand."

G65 and T39 show the quantity of money in circulation in New Zealand during the period 1934 to 1939. 1934 is the earliest date for which a full set of statistics is available. It is doubtful whether the Reserve Bank Amendment Act could have had any effect upon the 29/6/36 figures. Apart from the isolated and temporary increase in the quantity of money in June 1937, there is nothing to suggest that the powers conferred on the Government by the Reserve Bank Amendment Act were used for a reflationary monetary policy. In fact, the quantity of money increased at a slower rate after 28/6/37 than it did before this date; though there is some evidence that the powers of the Reserve Bank may have been used to stabilise the quantity of money in circulation.

### C. Reserve Bank Control of the Quantity of Money.

The Reserve Bank has three methods of altering the quantity of money in circulation. It can vary its own note issue, the reserve ratio, or the discount rate.

#### (1) The Reserve Bank note issue.

G23 and T46 show that the note issue of the Reserve Bank doubled between 1934 and 1939, and that the rate of increase increased slightly after the end of 1936. This was probably due to a desire to increase the quantity of money in circulation.

#### (2) The Reserve Ratio.

Trading banks lend the money that they receive on deposit. Although the advances will probably not be lodged with a bank by the people who borrow them, much of the money advanced by trading banks will find its way back to the trading banks again as demand deposits. Hence, an increase in advances by trading banks will result in an increase in demand deposits with the trading banks. Demand deposits lodged with trading banks are the major component of the quantity of money in circulation.

The system will work in reverse - if the trading banks call in advances, there will be a drop in the level of demand deposits lodged with the trading banks.

The Reserve Bank demands that a certain proportion of all trading bank lodgments be lodged with the Reserve Bank. The proportion of deposits that must be lodged with the Reserve Bank is known as the reserve ratio. If the Reserve Bank raised the reserve ratio, it is unlikely that the trading banks will have cash on hand to increase their lodgments with the Reserve Bank. Instead, they will reduce advances, and so deposits, so that the existing level of lodgments with the Reserve Bank will be a larger proportion of the now reduced level of deposits. Similarly, if the reserve ratio is reduced, trading bank lodgments with the Reserve Bank will be in excess of what they need be, and so advances, and deposits, can be increased. Whenever the level of deposits is increased, the quantity of money in circulation increases, and vice versa. Bankers, then, have to reconcile two opposing factors - the desire to increase advances, and so increase interest receipts, and the knowledge that if they do so, deposits will also increase, and the reserve ratio requirements will not be fulfilled.

It is always possible for the Reserve Bank to reduce the quantity of money in circulation by increasing the reserve ratio; it is not always possible for the Reserve Bank to increase the quantity of money by reducing the reserve ratio, however; for although it can make increased advances, and so deposits, possible, it cannot force bank managers to make the additional loans, nor can it force the public to take them up. Hence the reserve ratio is more a deflationary measure than an inflationary one.

S45 of the Reserve Bank of New Zealand Act, 1933, laid down that the trading banks must maintain at all times at the Reserve Bank balances equivalent to at least 7% of demand liabilities, and 3% of time liabilities. The Reserve Bank Amendment Act of 1936 gave the Bank power to alter these ratios, but in fact this power was not exercised till 1952. <sup>(1)</sup> Therefore, the fall in trading bank deposits with the Reserve Bank from the end of 1936 till the end of 1938, and their subsequent rapid rise (see G53 &

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(1) P107, "Monetary and Fiscal Policy in New Zealand."

T46) had nothing to do with a deflationary or reflationary reserve ratio policy - instead, they represent changes in trading bank supply of loan moneys, and public demand for it.

### (3) The Discount Rate.

In addition to acting as controller of the quantity of money, the Reserve Bank also acts as the Trading bank's banker. If a trading bank needs money, it can borrow it from the Reserve Bank, by discounting bills of exchange. The rate of interest charged by the Reserve Bank for these loans is known as the discount rate. Trading Banks may have to borrow for two reasons: Firstly, they may have to borrow following an increase in the reserve ratio, during the period before they can call in sufficient advances to lower the level of deposits. If the discount rate is high, this will encourage trading banks to reduce the level of their advances quickly. Secondly, trading banks may have to borrow following a temporary imbalance in their transactions. One bank on its own cannot change the level of its advances without failing unless all the other banks do likewise. It is in practice impossible for all the banks to keep perfectly in step, with the result that there is likely to be at any time a temporary drain on the funds of any one bank, that does not amount to anything like a bank crash, but which will reduce the bank's reserves to below the reserve ratio requirements. In this case, the trading bank concerned borrows from the Reserve Bank. If the discount rate is high, trading banks will try to avoid this situation by keeping reserves considerably in excess of the reserve ratio requirements; if the discount rate is low, they will be willing to increase advances, and so deposits, to the level where their reserves only just cover the reserve ratio requirements.

Like the reserve ratio, the discount rate can force a deflationary monetary policy upon the economy, but it is difficult to use the discount rate for a reflationary policy.

It is difficult to see whether the trading banks had to borrow from the Reserve Bank or not. T42 shows that the discount rate doubled late in 1938, and did not fall again till late in

1939, at which date it was still 3%. G54 and T46 show that "other advances" of the Reserve Bank rose from just over £1m. to £11m. between 27/6/38 and 26/12/38, and they remained at a high level till the end of the decade. The composition of the "other advances" figures have never been published, and as a matter of policy, the Reserve Bank will not disclose their composition. Among these other advances will be included advances to trading banks and to the Government. If the former is partially responsible for the large increase in other advances, it would seem that the rise in discount rate was used to stop the trading banks borrowing from the Reserve Bank, and to force them to reduce their own advances. If this is so, then the policy did not succeed, because "other advances" remained very high for eighteen months at least, and had risen to £19½m. by 25/12/39. This fact, coupled with the lack of any sign of borrowings from the Reserve Bank in the published figures for trading bank liabilities for the period (G61 & T44) would suggest that in fact the rise in "other advances" did not result from advances to trading banks, but, in all probability, to the Government. There is no evidence that the discount rate was effective as a reflationary measure during the early part of the Labour Party Government.

## S2. The Velocity of Circulation.

The velocity of circulation of money is the speed with which money changes hands. If money changes hands more rapidly, this will act in some ways like an increase in the quantity of money; while if the velocity of circulation decreases, this will have an effect similar to a decrease in the quantity of money.

T64 and G40 show the volume of banking business in New Zealand, which gives some indication of the velocity of circulation. As can be seen, the volume of banking business increased considerably between 1935 and 1937; the increase would have been greater had government debits and clearings,

which were transferred to the Reserve Bank after 1934, been included in the statistics.

The velocity of circulation cannot be directly changed by Government intervention, however; it is related to general economic activity, tending to rise when economic activity increases, and vice versa. Hence the rise between 1935 and 1937 can be attributed to Labour Government policy only in so far as that policy brought about a post 1935 increase in economic activity.

### S3. The Rate of Interest.

On page 42 a graph was drawn which, for a given quantity of money and liquidity preference, set the rate of interest. The rate of interest so arrived at is the rate that people are willing to offer for money, the most riskless of all investments. Although investment in the Government is almost as riskless as buying money, the rate of interest offered on loans to the Government is not necessarily the "natural" rate of interest - it is set by the Government, and may be deliberately set high or low, as a matter of policy. In theory, a fall in the rate of interest offered by the Government will widen the gap between this rate of interest and the yield on other investments, and so increase the marginal efficiency of capital. In fact, however, there is always the possibility that investors may lose confidence in investments if the rate of interest on loans to the Government falls, and it is by no means certain that a reduction in the rate of interest on Government loans will increase investment in the private sector.

Furthermore, there was not one rate of interest offered by the Government in the '30s, but several, including that offered on direct loans to the State, that offered by the Post Office Savings Bank, and that charged by the Reserve Bank for loans to trading banks, and known as the discount rate.

Table 42 sets out the Reserve Bank discount rate. As can be seen, it had already been lowered  $\frac{1}{2}\%$  before the Labour



Government took office, and was reduced another 1% in March 1936, probably at the request of the Labour Government, though it was not fully in command of the Reserve Bank at that stage. The ratio was lowered again, by  $\frac{1}{2}\%$  in June 1936, at which level it stayed till the rate was doubled late in 1938. The initial decreases were undoubtedly to encourage trading banks to lend more, for, as table 43 shows, they were charging  $4\frac{1}{2}\%$  as from 30/11/34. The sudden rise in the discount rate late in 1938 was probably an effort to reduce the demand for imports, and the subsequent fall in 1939 may have been due to the still high rate of unemployment, or it may have been due to the need to encourage war investment; the further reduction in the discount rate on 27/5/40 was probably due to this cause.

The Labour Government did not manipulate the P.O.S.B. rate of interest, which remained at 3% on deposits up to £500 and  $2\frac{1}{2}\%$  for deposits over £500 and up to £2,000 as from 1/3/35.

The Labour Government floated two cash loans on the open market. The first was offered on 15th January, 1937, and although it was open to cash subscribers, it was intended primarily as a reinvestment loan for holders of 4% Government stock maturing on the above date. It offered 3% stock repayable on 15th July, 1939/41, and  $3\frac{1}{2}\%$  stock repayable 15th January, 1953/57, both being issued at par. As can be seen, this represented a lowering of the rate of interest on gilt edged securities.

The rate of interest was raised again to 4% for the 1939 issue, when stock was offered maturing 30th November, 1958, and 31st May, 1954/58. The effective rate of interest was slightly higher than this, for the former securities were offered at an issue price of 99%, and the latter at 96%. (1)

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(1) Information of New Zealand internal cash loan issues was supplied by the Reserve Bank of New Zealand.

From the above it seems probable that the State did attempt to increase investment by reducing the rate of interest, especially the discount rate, to below the natural level. Whether it succeeded, or whether the marginal efficiency of capital also fell, may be ascertainable from a study of savings and investment, especially savings and investment through the trading banks.

CHAPTER VI. SECTORS IN WHICH STATE INTERVENTION TOOK THE FORM  
OF PRESCRIPTION - CONTINUED.  
SAVINGS AND INVESTMENT.

S1. Investment through the State Advances Corporation.

It has already been mentioned that when the Government manipulates the reserve ratio and the discount rate, it can effectively stop an expansion of credit, and so of savings and investment, but it cannot so easily cause an expansion of credit, savings and investment. The Government can do two further things, however, to bring about this expansion.

Firstly it can seek to stimulate the rest of the economy through its own financial policy. This has already been dealt with in chapter III.

Secondly, the Government may make loans available to those willing to borrow money, and at the same time seek to give confidence to private investors. The State Advances Act of 1936 was intended to do just this. The principal terms of the S.A.C. Act are as follows:-

The name of the "Mortgage Corporation of New Zealand", a semi-state body, was changed to "The State Advances Corporation of New Zealand". The private shareholdings in the Corporation were cancelled, with shareholders receiving cash or Government stock at their option. (SS3 & 4). Any cash payments made under SS3 & 4 were to be made by the S.A.C., which would be reimbursed by the Government. (S4). The capital of the Corporation was to be maintained at £1m, and the board of management was to be appointed by the Government. (SS6 & 9). The State Advances Superintendentship and the State Advances Board were abolished, and the State Advances Corporation was to administer the 1922 Housing Act. (S16). Section 23 states:-

"The principal business of the Corporation shall be the making of loans in accordance with the provisions of the principal Act, as amended by this Act, with a view of giving effect to the policy of the Government in that respect as communicated to it from time to time by the Minister of Finance."

All stocks, bonds and securities issued by the Corporation were to be State backed, (S25), and the borrowing powers of the Corporation were to be unlimited. The lending powers of the Corporation were extended beyond those contained in the principal Act, so that the Corporation could make loans to Local Bodies for the building of worker's dwellings, (S28), and could also make loans to develop new or existing industries (S29). The Corporation could lend up to  $\frac{2}{3}$  on the value of the security, or more if the Minister of Finance would guarantee the Corporation against loss (S30). SS30-38 generally made it easier for the public to get loans.

The compiler of the 1941 Year Book states on page 532, "The change in administration and the institution of a State guarantee on securities issued by the Corporation represented the major alterations in the pre-existing law."

That the S.A.C. Act may have succeeded in stimulating private investment is suggested by the "refinance" column of Table 41, which shows a marked decrease between 1937 and 1940. At the same time, the S.A.C. made loans of increasing value for the erection of private dwellings, which would suggest that this area of investment may have been the least attractive to private investors; or it may have been due to policy on the part of the Board of Management of the S.A.C. The fall in 1940 of total loans outstanding was probably due to a policy decision, (see also G85), owing to the need to channel funds into war investment.

Private investment will now be studied, looking firstly at savings and investment through institutions, and then at some of the indicators of the general level of savings and investment.

#### S. The level of Private Savings and Investment.

##### A. Savings and Investment Through the Trading Banks.

Gs 57 to 61, based on T44, show trading bank liabilities, while G62 and T45 show trading bank assets. As G58 shows, the total liabilities of New Zealand Trading Banks remained fairly stable during the 1930s. G61 shows, however, that from

1934 onwards, (the earliest date for which composition of liabilities figures are available) until the beginning of 1937, there was an increase in New Zealand demand liabilities at the expense of New Zealand time liabilities - a fact that the more precise G57 bears out. There was a similar period of change during 1938. At the same time, there was a similar relative growth, though of less absolute importance, in foreign demand liabilities at the expense of foreign time liabilities. (See Gs 59 & 60). Much of the post 1934 increase in the quantity of money, then, represented a transfer of funds from time to demand deposit at the trading banks.

The assets of trading banks rose fairly steadily from the end of 1933 to mid 1937, after which they remained fairly constant. As can be seen from G62, the total amount of coin and bullion, reserve bank notes, and balances held at the Reserve Bank, of the trading banks, remained fairly constant from the end of 1934 to the end of the period, with balances held at the Reserve Bank showing some tendency to fluctuate, probably due to changes in the level of advances to which lodgments at the Reserve Bank are tied by the reserve ratio. Overseas assets of the trading banks followed a yearly cycle, due to export receipts being received mostly in the first half of the year; they also declined in value till the end of 1938. Trading bank advances rose slightly until the end of 1937 - and for the remainder of the decade they remained at their 1937 level. There may be some connection between the rise in bank advances in 1937, and the sudden fall in overseas funds in 1937 and 1938. The value of securities held by the trading banks rose 200%, at a fairly constant rate, between mid 1934 and the end of 1939.

The rise in the level of demand liabilities of the trading banks until mid-1937 would represent an increase in the quantity of money, while the fall in time liabilities might possibly represent an increase in the liquidity preference of people. The slight increase in advances does not necessarily represent an increase in investment. Bank managers are usually willing to lend for consumption purposes, provided there is some

investment good offered as security. The fact that there was corresponding decrease in the overseas funds of the trading banks seems to suggest that the increase in advances was spent on increased imports rather than on increased New Zealand production.

T45 also shows an analysis of trading bank advances. Generally, farmers lost ground in favour of industries, although the services, (retailers, transport, local municipal authorities, public utilities, stock and station agents, hostels and restaurants, and financial companies) absorbed more of the increase in advances than did any other section of the community.

#### B. Savings and Investment through the Post Office.

Savings lodged with the Post Office are normally available to the Government. G66 and T47 show the total amount to the credit of P.O.S.B. depositors' accounts. A constant level of total deposits would represent no saving, and so no P.O.S.B. funds available for Government use: a rise in the total amount to the credit of depositors accounts represents an increase in savings (presuming no corresponding decrease in savings elsewhere), while a decrease in the total amount to the credit of depositors' accounts represents dissavings. In times of depression there is likely to be a fall in the level of depositors' accounts; there will be few new deposits, due to the low level of money national income, while some depositors will have to draw on their savings to maintain their customary level of consumption. In a period of reflation or boom there are two factors at work. Firstly, there will be a bigger money national income, and so, probably, an increased marginal propensity to save; some of these increased savings will find their way into P.O.S.B. accounts. At the same time, there may be some withdrawal of past savings from P.O.S.B. accounts, due to increased investment by savers themselves, especially in consumers' durables. Probably the first factor would outweigh the latter, and one would expect to see an increase in savings lodged with the P.O.S.B. during a period of reflation or boom.

G66 and T47 show that the level of P.O.S.B. account balances

did rise after 1933, to be approximately £20m bigger in 1938 than in 1933. The rate of increase was fairly constant, although there was a slight decrease in growth in 1936, and an increase in 1937. The State did nothing specific to change the level of P.O.S.B. savings, however, so it must be assumed that, if the Labour Government did have any influence on the 1937 figures, it must have been a secondary effect of its overall programme, or else of psychological origins.

G67 shows more clearly the change in the level of saving with the P.O.S.B. In this graph, a horizontal line represents a constant level of annual saving or dissaving, depending upon whether it is above or below 0, while a straight rising or falling line represents a slightly less than constant rate of increase or decrease.

It can be seen from this graph that the turning point in savings really came in 1932, but that it was not until 1934 that the level of deposits actually exceeded the level of withdrawals for the first time in that decade. The rate of increase in the excess of deposits over withdrawals fell in 1935; there was a small decrease in the excess of deposits in 1936; a slight rise in 1937, and a fractional fall in 1938. This relative lack of growth, in the late '30s, of savings lodged with the P.O.S.B., despite an increase in money national income, may have been due to an increased demand by savers for their own money to invest, especially in consumer durables, or it may in part be due to rising prices wiping out any effect on real wealth of the increases in income of wage and salary earners - the class of people who normally lodge their savings with the P.O.S.B. The excess of withdrawals over savings in 1939 may be due to the same causes.

The most important conclusion to be drawn from this section is that although there was an excess of deposits over withdrawals at the P.O.S.B. in 1935, '36, '37 and '38, this excess was at a fairly constant rate, despite the increasing level of money national income.

#### C. Savings and Investment Through Trading Companies.

Trading companies were among the original bankers in pre-industrial revolution England, and although the banker-trading company had practically died out by the time of pre-war New Zealand, there were still a few firms, especially stock and station agents, which accepted money on deposit from customers. As T48 and the relevant part of G68 show, deposits lodged with trading companies declined, at a fairly constant rate, throughout the decade. This decline was the tail-end of the decline of the trader-banker, which had begun a hundred years earlier, and was little influenced by deflation, inflation, or Government policy. There are no figures available to show how these companies invested the money they received on deposit.

The rate of interest offered by trading companies for deposits was lowered three times in the 1930s, on 30/6/32, 31/3/33, and 31/7/34. The rate of interest remained at its 1934 level for the rest of the decade. The rate was:- (1)

Deposits at call or under 3 months:	2 $\frac{1}{2}$ %
" at 3 months & " 6 "	3 $\frac{1}{2}$ %
" " 6 " " 12 "	3 $\frac{3}{4}$ %
" " 1 year " " 2 Years	4%
" " 2 " " 3 "	4 $\frac{1}{2}$ %
" " 3 " "over	4 $\frac{3}{4}$ %

These rates were well above those offered by the Post Office, and compare favourably with that offered on Government securities. There was, however, some slight risk attached to depositing savings with trading companies. The range of interest rates suggests that an effort was made by the trading companies themselves to reduce this risk; trading companies probably lent long-term, and they seem to have been anxious to borrow long-term as well

#### D. Savings and Investment Through Building Societies.

Members of a building society make regular weekly contributions to a common pool. When this pool of money reaches a predetermined figure, it is allotted by ballot to one of the members as an interest free loan. If the member wants the loan, then his regular contributions become loan repayments. If he does not want the loan, he can sell it to another member. If he

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(1) 1941 Year Book, P607.



wants to withdraw from the society, he has two courses open to him - he may just cease to make his regular payments, or, if he has been paying into the society for some time, he may sell his shares to an outsider. Being of a semi-contractual nature, contributions to a building society tend to be more stable than most forms of saving. In times of depression, however, the number of discontinued memberships tends to rise, and members may get behind in their payments without actually giving up membership. The catching up on overdue payments after a depression may result in a temporary increase in funds deposited with Building societies.

As can be seen from T48 and G68, building and investment society deposits did not fall greatly during the depression, and after an initial increase of 13% during the year ended 30/6/36, settled down to a fairly steady increase of about 7% to 9% p.a.

As can be seen from G70 and T49, building society funds were predominantly lent to members on mortgage, most of which would be spent on the building of houses.

In addition to accepting regular payments as instalments towards a loan, building societies also run business reserve schemes, and superannuation schemes, and accept money on deposit. Like the rate of interest offered by trading companies for deposits, the rate of interest offered by building societies was also reduced three times in the early '30s. The rate as from 31/7/34 was:-<sup>(1)</sup>

Deposits at call and under 3 months	2%
" " 3 months and under 6 months	2 $\frac{3}{4}$ %
" " 6 " " 12 "	3%
" " 1 year " " 2 years	3 $\frac{1}{2}$ %
" " 2 " " 3 "	3 $\frac{3}{4}$ %
" " 3 " and over	4%

These rates are less than those offered by trading companies, which is presumably a sign of the lesser risk associated with building society investments. The same bias towards long term deposits that was noted in the trading companies rates of interest

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(1) 1941 Year Book, Page 607.

are also noticeable in the rates of interest offered by building societies. It is doubtful whether the high rates of interest offered by trading companies and building societies attracted additional savings to these concerns, but the bias in the rates of interest in favour of long term deposits may have encouraged some depositors to deposit long term rather than short term.

#### E. Savings and Investment Through Trustee Savings Banks.

In the 1930s, there were five trustee savings banks; one each at Auckland, New Plymouth, Dunedin, Invercargill, and Hokitika. Trustee Savings banks accept money on deposit, for which they pay interest. From 1/4/33 onwards the rate paid was 3%, and the maximum deposit was £200. (1) These funds are invested in approved shares; by law, a large proportion of trustee savings bank funds must be invested in Government and local body stocks. Any profits that a trustee savings bank makes must be donated to charity.

As can be seen from G68 and T48, deposits with trustee savings banks rose from 1932 till 1939, though in 1939 the rise was slight. T50, however, shows that interest credited to depositors, and reinvested, was the major cause of this increase. From 1931 till 1934 there was little or no excess of deposits over withdrawals, and it was not till 1937 that the excess of deposits over withdrawals reached the 1930 level. The fall in the excess in 1939 and 1940 may have been due to a rechanneling of funds in the face of war, or it may have been due to increased profitability in other investment fields. There was also a fall in the increase in number of depositors in 1938-39, as compared with previous years.

#### F. Savings and Investment Through Friendly Societies.

Friendly societies, of which the greatest number are known as lodges, are incorporated bodies which exist chiefly to provide their members with financial support during illness and old age. The deposits received from members are invested; as G69 and T51 show, most of these investments took the form of mortgages on freehold property, though these rose less steeply than did total assets till 1934, after which they both increased at about the

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(1) 1941 Year Book, Page 606.

same rate. There were also small investments in Government and municipal debentures, and some funds were placed in trading bank fixed deposit accounts. A large proportion of friendly society assets remained liquid, presumably to meet sickness and old age payments to members. Deposits rose at a uniform rate throughout the decade, probably due to a long term outlook on the part of friendly society members.

#### G. Savings and Investment Through Insurance Companies.

Insurance is of two types - Insurance, and assurance, including industrial assurance. Each type represents a different type of savings and/or investment, and will be looked at separately.

Life and industrial assurance premiums represent savings, in that the insured or his estate will receive back again, on a certain date or at death, at least the full amount of the premiums paid, plus an amount that is similar in essence to interest, but which is called a bonus. The difference between interest and a bonus is that a bonus is not a contractual amount, and it is paid in one lump sum when the policy matures. Assurance policies are taken out usually to give financial support to oneself or one's family in old age or after the assured's death, and it is doubtful whether the current bonus (interest) rate offered by assurance companies as a whole has much to do with the taking up of policies, though competitive bonus rates may have an effect upon with which company the assured insures.

Because of the contractual nature of insurance policies, savings, (called premiums), through insurance companies, tend to be relatively stable during a period of economic fluctuation. There may be some premium decline during a depression, however, firstly because policies may be surrendered or discontinued if the insured cannot keep up the premium payments, and secondly, because as existing policies mature, there may be fewer new policies to take their place. During a period of reflation there may be a temporary increase in premiums due to the catching up on premiums in arrears, and a permanent increase in premiums due to an increase in the number of new policies issued.

G71, 72 & 73, and T52 show the levels of life assurance

cover and premiums payable during the 1930s. The curves of G71 and G72 follow much the same course; neither fell very steeply in the depression, and both began to rise steeply in 1935. There was a slight increase in growth in 1937, and after this a fall off.

G73 graphs premiums lost through the discontinuation of policies, and premiums gained through the issue of new policies. The fairly large overall level of premiums lost is due to policies being discontinued on maturity.

Gs 74, 75 & 76, and T53 show cover and premiums for industrial assurance. G74 and G71 are almost identical, except that the scale is different - industrial assurance has never been as popular as life assurance, probably due to its higher running expenses, and so smaller bonuses. Similarly, G75 and G72 are almost identical - the difference in slope is due to the difference in vertical interval. G76 is slightly different from G73, however, in that the rise after 1932 in new premiums was not as great for industrial as for life assurance, while the rise in premiums lost during the depression was greater; both differences being representative of the fact that industrial assurance appealed in general to an economically poorer class of people than did life assurance.

The fall in new premiums in 1938 and 1939 for both life and industrial assurance, coupled with a rise in premiums lost from 1937 onwards in the case of industrial assurance and in 1938 in the case of life assurance, may indicate a fall in the amount of income available for savings, which may have been due to increased consumption, or a fall in purchasing power despite the continued rise of money national income.

Although the New Zealand Year Book from which they were taken is not very clear on the matter, it seems probable that G77 and T54 represent the assets of life, and possibly industrial, assurance companies. As can be seen from this table and graph, there was a fall in the rate of growth of investment in private property, notably mortgages on property, especially during the early '30s, and a marked increase in investment in

Government and municipal and local body securities. Whether this was brought about by Government pressure, or whether it merely reflected the riskiness of the private loan market is uncertain. The effect of the purchase of securities by insurance companies would be to free other private capital. If this freed capital was invested in private enterprises, there would be no overall effect of the change in insurance company investment policy. If this freed capital was not so invested, the changing assurance company policy may have resulted in a net loss of investment.

Insurance, such as fire insurance, accident insurance, etc., differs from life and industrial assurance in that the premiums do not represent savings - they are irrecoverable payments, for which the insured will receive no value in return. Even in the event of a fire or accident etc., the insured is merely returned to his previous economic state by the insurance company - he does not get his premiums refunded. Hence, from a savings and investment point of view, only the assets of insurance companies are of interest.

G78 and T55 set out fire insurance company assets (1).

It seems probable that there is an inconsistence between the figures for before 1933 and after 1932. Despite this, it is clear that Government and local body securities formed a major, though decreasing, part of insurance company investments, while "other assets" and the companies' own land and building properties rose. A comparison between G77 and G78 shows that insurance company investment was of relatively little importance compared with assurance company investment; between 1933 and 1938 there may even have been some disinvestment by insurance companies.

#### H. Investment in Joint Stock Companies.

Investment in joint stock companies can be of two sorts;

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(1) Although these are referred to in the Year Books as the assets of fire insurance companies, in fact there is no such thing as an insurance company that insures only against fire, therefore it may be assumed that these are the assets of all insurance companies.

new issues of shares in established companies, and first issues by new companies. No figures are available for the former, but there are figures available showing the number of new companies registered each year, and their nominal capital.

New companies may be of two types - foreign companies, or wholly owned subsidiaries of foreign companies, and New Zealand companies. The former represent investment of foreign savings in New Zealand, while the latter represent the investment of domestic savings.

Gs 81 & 82, and T56 show the total number of new joint stock companies registered, the number of foreign joint stock companies registered, and the aggregate nominal capital in each case. The figures had to be adjusted because of the enforcement of registration upon established foreign companies in 1934. G81 suggests that 1935 was the best year for investment in new companies, with companies with a nominal capital of £24m being floated that year. G82II shows that only £8.3m of this capital came from overseas. This means that shares worth approximately £15m were offered to the New Zealand public in 1935. Although this figure seems high, two factors modify it: firstly, nominal capital is not the same as subscribed capital, and it is the level of subscribed capital that shows the true level of investment in joint stock companies; and secondly, the number of new companies floated in 1935 fell below the 1934 and 1936 numbers, which suggests that a few large companies may have been responsible for the large increase in nominal capital issues in 1935.

There are no figures available for the total value of subscribed shares during the 1930s, but on the basis of the nominal capital issues figures, the biggest increase in investment in shares appears to have taken place before the Labour Government came to power, and was followed by a period of low investment, that reached its lowest point in 1937. At the same time, however, the total value of share issues by new companies remained remarkably steady during the 1930s, not falling below £6m, nor, apart from 1935, rising above £10m.

The nominal capital of new foreign companies registered in New Zealand fluctuated more violently than did the nominal capital issues of New Zealand owned companies; but at all times investment in foreign owned companies appears to have been of less importance than investment in New Zealand owned companies. And, as with New Zealand owned companies, the nominal capital issues of foreign companies fell from 1935 to 1937, after which there was a slight rise till 1939.

In addition to the buying of new shares in companies, investors also trade in shares that had originally been issued to someone else. Although trade in these shares does not increase the productivity of the companies concerned, nor increase employment opportunities, a rise in share prices does absorb savings, and the trade in past issues of shares is usually most brisk when new share issues are being successfully floated. G83 and T57 show that industrial share prices had been restored to their 1929 level by 1935, and that they remained at approximately this level till 1938, after which they fell again, to rise slightly in 1940. All share prices followed the same pattern, except that they did not ever reach their 1929 level. This suggests that during the reflation, industry recovered sooner, and more completely, than did the rest of the economy. The trend of both the industrial share prices index, and the all share prices index reinforce the conclusion that investment in joint stock companies, and confidence in the share capital market, had been restored, to the extent that it ever was restored, by 1935, after which investment in joint stock companies may have followed a slightly downward trend.

### S.3. Some Other Indicators of the Level of Savings and Investment

#### A. Capital Goods.

Capital goods are those that are used for the production of other goods, and it is for the purchase or production of these goods that most investment takes place. Hence a rise in the production or import of capital goods would indicate an increase in investment, and vice versa. There are no figures available

for the production or importation of capital goods, but there are value and volume index numbers available for total goods available for use, and for goods other than capital goods. (See T1 and G63.)

The volume index numbers suggest that, with goods other than capital goods falling less than did the total of goods available for use, capital goods must have fallen more than both, till 1932. (See T1) The value index numbers (T1 & G63) show that the value of goods other than capital goods also fell less than did the total of all goods available for consumption. Both these series taken together suggest that value and volume of capital goods both fell at a faster rate than did non capital goods till 1932.

The volume index numbers from 1932 till 1938 show that goods other than capital goods rose less than did the total of goods available for use, therefore presumably the volume of capital goods rose more rapidly than did either. This is also suggested by the value indexes, although these suggest that the value of capital goods may have continued to rise in 1939, when volume probably didn't rise very much.

Although the figures presented suggest that there was a larger increase in the production of capital than consumption goods between 1932 and 1938, there is nothing to suggest that the increased production of capital goods was of itself a very large increase.

#### B. Mortgages Registered and Discharged.

Most private and some public loans are covered by mortgage. Hence the figures for mortgages registered and discharged give some indication of the level of investment through loans. Although a loan does not necessarily have to be spent on investment goods, in many cases it is, firstly because lenders require that it be spent on something tangible as a security, and secondly because they tend to lend for projects that will produce income out of which to repay the loan, rather than to lend for consumption.



G79 and T58 show the value of mortgages registered and discharged. The fact that the level of mortgages discharged fell during the depression was probably due more to the inability of mortgagors to repay flat mortgages than to the willingness of mortgagees to grant extended or new mortgages. An increasing number of mortgages were discharged after 1933, though new mortgages did not start to rise in number till 1934. Mortgages registered reached their peak, at a level less than half that of 1930. Their value fell slightly in 1938, was restored in 1939, and fell slightly again in 1940. Mortgages discharged followed much the same pattern, except that they fell in value from 1937, and at an increasing rate from 1938 onwards.

T58 also shows the average rate of interest charged under mortgage agreements. This rate fell from 6.35% in 1930 to 4.6% in 1937, after which it fluctuated at about this figure. The steady fall in the average rate of interest charged on mortgages, may have in part been influenced by the falling Reserve Bank discount rate, but the chief cause of the fall was probably that the rate on many mortgages was unrealistically high in 1930, and mortgagees who could not be repaid upon maturity, and who had to refinance the mortgage, had to do so on terms that were more realistic.

### C. Bankruptcy.

There is a difference between bankruptcy and insolvency. A person is insolvent when his assets are insufficient to meet his liabilities. He only becomes bankrupt when his creditors, or he himself, go through the necessary legal processes to have him declared a bankrupt by the supreme court. A person will not usually have himself declared bankrupt unless he is hopelessly in debt and under pressure from his creditors, because an undischarged bankrupt has many of his liberties curtailed, including his right to buy on credit. Similarly, creditors will not normally have an insolvent debtor declared bankrupt if they feel there is any hope of their being paid in full in the future. Hence, the bankruptcy level is an important indicator

of the business communities expectations as to the future, and so of the marginal efficiency of capital.

The number of bankruptcies fell fairly steadily from 1931 to 1935, after which they remained fairly stable, as G80 and T59 indicate. At the same time the average debt proved per estate did not fall to the same extent, and in 1937 and 1938 rose again, to fall only slightly in 1939, and considerably in 1940. These two facts together would suggest that creditors did not become any more optimistic after 1935, while debtors who were declared bankrupt after 1936 tended to be more deeply in debt than had those declared bankrupt before 1935.

#### D. Patents etc. Registered.

Patents and designs are the result of innovations. Although some innovations are the product of continuous research that is carried out irrespective of economic stimulation, other innovation results from a specific demand, which is more likely to be exercised during a period of reflation and boom than a period of deflation and depression. Hence although there is a stable factor associated with the number of patents and designs registered, there is also an unstable one, related to the level of economic activity. To the extent that innovations are put into effect they call for investment, and although it does not necessarily follow that all patents and designs registered are put into effect, the level of patents and designs registered should nevertheless give some indication of the level of investment.

As G84 and T60 show, the number of designs registered during the '30s varied very little. The number of patents registered fell till 1935, and then rose at a rather erratic rate, to fall again in 1939. The level was at all times fairly high, however. The conclusion would seem to be that if investment did increase during the late '30s, it was not of an innovationary kind.

Trade marks do not represent innovation. They result from a desire to capture demand, especially increased demand. Hence the number of trade marks registered could be expected to rise during a period of reflation, and to fall during a period of deflation. G84 and T60 show that during the '30s, trade marks

registered in New Zealand fell till 1933, rose till 1936, then fell again. This suggests that the period of most activity from producers may have been between 1933 and 1936. The fact that trade marks registered, although at a lower level, follow almost exactly the fluctuations in the number of patents registered, but two years earlier, may be pure co-incidence; there appears to be no real reason why the two should be closely connected.

#### S4. Conclusion.

It has been suggested that sometime in 1937 the New Zealand economy ceased to expand, despite the fact that real national income was below the full employment level; and that for at least a year previous to this the rate of economic expansion had been slowing down. On the basis of this study of savings and investment, it is now suggested that the settling of the economy on a national income level below the full employment level was caused by a lack of investment; and that this lack of adequate investment was in spite of the Labour Government's reflationary policy. Although there have been signs throughout this chapter of some increase in investment, in the late '30s, there have been no signs of any really great increases. There have also been very few signs of any changed, increasing rates of investment after 1936, as one would have expected had there been an effective Government policy of investment stimulation. A brief review of the main graphs relevant to this chapter bears out both of these conclusions.

G85, "S.A.C. New Business" (S1) showed that not only was S.A.C. business relatively unimportant, but there was a slight downward trend in new business during the four years 1937 to 1940.

Trading Bank advances rose only slightly until 1937, after which they remained fairly stable, as G62 showed. (S2A)

G67, ("P.O.S.B. Excess of Deposits Over Withdrawals") suggested that by 1935 the increasing rate of increase in P.O.S.B. savings, and so in money available to the Government for investment, had ceased, and was followed by a period of

fluctuating increases, finally to give way to a rate of decrease in 1939. (S2B)

G68 graphed deposits with trustee savings banks, building societies, trading companies and friendly societies. Most of the deposits so received were invested. Although this graph showed an increase in deposits from 1934 onwards, this increase averaged only about £2m p.a. at a time when money national income was in excess of £125m p.a.; hence deposits with these institutions were relatively unimportant. Increased deposits with these institutions rose less in the last years of the decade than they had previously. (S2C,D,E&F)

Assurance Companies too, although they received more premiums in the late '30s than in the early '30s, did not take more than £5m in 1939, when money national income was approximately £185m. Their investments show a similar steady but relatively insignificant rise. (see Gs71-77). At the same time the assets of Insurance Companies fell from 1933 onwards. (See G78) (S2G)

Apart from in 1935, investment in the share capital of new companies appears not to have risen above £10m p.a. during the 1930s, (See Gs 81 & 82), and in fact may have been considerably below this nominal capital figure. The share price indexes too suggested that there was no great boom in the share capital investment market.

Finally, the other indicators of investment which have been studied - capital goods available, mortgages registered and discharged, bankruptcies, and patents, designs and trade marks registered, - all show signs of a slackening in investment activity in the late '30s; and none of them show any signs of the really great increases in investment that would have been necessary to provide employment for all of the people unemployed (possibly one quarter of the labour force) in 1933.

CHAPTER VII. SECTORS IN WHICH STATE INTERVENTION TOOK THE  
FORM OF PRESCRIPTION. - CONTINUED.

PRICES.

Prices are included in this section, partly because they naturally belong here, and partly because, although there was little prescription as to the level of prices, there always could have been.

If prices are free to fluctuate, they will tend to rise when demand exceeds immediate supply, and to fall when immediate supply exceeds demand. Because supply, as well as demand, is usually to some degree elastic, changes in economic activity usually change some time before prices change. Price changes are what bring about a divergence between real and money national income.

S1. New Zealand Internal Prices.

A. Wholesale Prices.

G87 and T6 show wholesale price index numbers. The index numbers for "Consumer goods: Foodstuffs (Class I)" and "Locally Produced Goods" both fell more in the depression than did any other group, probably because the components of these two groups were the same. The index numbers for these two groups, plus "Consumer Goods: Non Foodstuffs (Class II)", and Classes I and II combined had all reached their 1930 level again by 1938, after which they rose at a slightly increased rate till 1940. The wholesale price index numbers for the two classes of producers goods, the two classes of producers goods combined, and imports, had all risen above their 1930 level by 1937, after which they rose only slightly for two years, to rise steeply again in 1940. The index numbers for these groups did not fall as greatly as did the index numbers for consumers goods during the depression, and in general continued to be higher during the period of reflation. The general trend of all wholesale prices was for the index numbers to rise more steeply after than before

1936. The sudden rise in wholesale prices in 1940 was undoubtedly due to the influence of war, and caused by an increased actual demand, especially for producers' goods, and by a potential shortage of these goods.

The very large rise in building materials prices would seem to suggest that there was probably an increase in the rate of building construction during the late '30s. This possibility will be taken up again in a later chapter.

#### B. Retail Prices.

New Zealand retail index numbers are laid out in T62 and G88. Practically all retailed goods are consumers' goods, and so their price index numbers tend to follow the pattern of the wholesale price index numbers, except that the trough of the depression of most retail prices appears to have been in 1933, whereas it was 1932 for wholesale prices. The majority of retail price index number graphs do not rise much above the average 1926-30 level during the reflation. This is surprising for two reasons - firstly, because the wholesale prices for these goods appears to have risen, and secondly, because money national income was rising faster than was real national income. It is also surprising that the retail prices of necessities, such as the three food groups, fell lower during the depression, lower than did the index numbers for rent, fuel and light, and clothing, items that are generally considered less necessary than food. It may be that home grown food became more important during the depression, and forced the market prices for foodstuffs down.

Although the retail price indexes did not rise much above their pre-1930 level during the reflationary period, there was a considerable rise in prices between 1932 and 1940. It was this rise in prices that caused the levels of real and money national income to diverge during the late '30s.

### C. Wages, Share Prices and the Rate of Interest.

These have all been dealt with in previous sections. In brief, the effective wage rates received by workers were fairly constant during the depression, but rose between 1935 and 1938, to fall again in 1939 and 1940. The number of workers receiving these rates rose after 1934, though at a diminishing rate after 1936. (See Chapter I).

Share prices did not reach their 1929 level during the 1930's, though they approached it in 1935, after which they fell slightly in value again. Industrial shares did exceed their 1929 price level, however. (See Chapter VI).

The rate of interest in general tended to fall throughout the 1930's, though in some cases it rose again, though not to its 1929 level, in the last one or two years of the decade. (See Chapters V and VI).

## S2. New Zealand External Prices.

### A. Import Prices.

G86 and T63 show import prices for the 1930's. Although the price of imports fell less during the depression than did domestic prices, they rose hardly at all during the reflation, which would mean that while imports cost relatively more in the early '30s than did locally produced goods, they cost relatively less than did home produced goods during the later '30s. Or, expressed another way, although local prices did not rise much above their average 1926-30 level, they rose more than did overseas prices; there was more inflation in New Zealand in the later '30s than there was in most of the rest of the world. It was this relatively greater inflation in New Zealand than in the rest of the world that caused the foreign exchange crisis which will be studied in the next chapter. The sudden rise in import prices in 1940 was almost certainly due to war demand, both in New Zealand and in the exporting countries.

### B. Export Prices.

G89 and T64 set out the price index numbers for New Zealand's major exports, and also the weighted average export price index. This latter, it can be seen, reached almost exactly its 1930 level again in 1937, and then dropped again until approximately the outbreak of the war. The increased rate of increase from 1935 to 1937, and the subsequent fall was largely due to fluctuations in the price of wool; these fluctuations were sufficiently large to counteract the fact that wool was only the third largest of New Zealand's exports. The prices offered for the two largest of New Zealand's exports, butter and cheese combined, and frozen meat, did not reach their 1930 level till the outbreak of the war. Although the export prices for agricultural produce, timber and minerals, tended to be more favourable to New Zealand during the '30s, exports of these products were of little importance quantitatively.

### S3. Export Prices and the Level of Investment.

When discussing savings and investment theory in Chapter IV, four sources of demand were mentioned - consumption, internal investment, Government demand and foreign demand. Foreign demand was then forgotten, because it was a variable not affected by the domestic level of money national income, and beyond the power of the Government to control. It is now suggested that foreign demand, as expressed in export prices, was of prime importance in determining the level of real national income, and employment, in New Zealand.

Much of New Zealand's produce was (and still is) exported. Foreign demand has an effect, not upon the level of production of export commodities, for farm production tends to be relatively stable, but upon profitability and expectations. New Zealand is a "dependent economy", and doubtless the New Zealanders of the 1930's, in the middle of an economic crisis caused, as far as they were concerned, by a fall in overseas prices, were as aware of the fact as are present day New Zealanders, faced with a



possible economic crisis in the form of the E.E.C. It seems, therefore, more reasonable to assume that the marginal efficiency of capital in New Zealand was tied, not to the level of prices and money national income within New Zealand, but to the level of money national income in countries that import New Zealand exports, as expressed in the prices that they offered for those exports. In Chapter II it was seen that aggregate private income reached its lowest point in 1933, while the value of goods produced did not really begin to rise till after 1933. Similarly, unemployment reached its highest peak in 1933. Most of the other statistics presented are dependent for their value upon the level of national income and employment, and the majority of these too reach their lowest point in 1933. And 1933 was the year in which export prices reached their lowest ebb. In 1934, export prices improved considerably, and so did most aspects of the New Zealand economy. In 1935 export prices fell again, and many of the statistical series presented in this thesis show a similar fall. From 1935 to 1937 export prices rose rapidly, and this is the period of, in most cases, the most rapid rate of reflation. There seems to be reason to believe that businessmen in general, and investors in particular, looked to export prices when forming their expectations as to the future. This would explain why, after 1937, investment appears to have risen only slightly. The low over-all level of investment during the reflation could also be accounted for in that it would take several years of restored export prices for confidence in the overseas market to be restored. At the time when confidence might be expected to be restored (1937 onwards) export prices fell again.

If the hypothesis is correct that the level of investment and so of real national income and employment in New Zealand is determined by the level of foreign money national income, as expressed in prices for New Zealand's exports, then it can be seen why the level of investment, real national income and employment all ceased to rise significantly after some date

during the first half of 1937, despite the Labour Government's  
reflationary policy - the New Zealand Government cannot, by its  
own domestic policy, influence the level of money national income  
in other countries.

CHAPTER VIII.      SECTORS IN WHICH STATE INTERVENTION TOOK  
THE FORM OF PRESCRIPTION - CONTINUED.

FOREIGN TRADE.

Prices of imports and exports have already been dealt with. This chapter will deal with the value and volume of imports and exports, their composition, and the country of origin/destination.

S1. Value and Volume of New Zealand Imports and Exports.

Both G90 and G91 are based on the relevant sections of T1. Both represent merchandise only, hence they do not show the effect upon the balance of payments of interest payments on the overseas debt, and shipping costs payable in sterling, etc. Although export prices reached their lowest level in 1933, (see previous chapter) the value of exports had started to rise again by 1933, due to the influence of a rise in volume, which began in 1931, and continued till 1934, the year in which export prices reached a peak. Export prices fell again in 1935, and so did export volume, to cause a considerable fall in export values. 1936 saw a rise in export prices, volume and value, while in the year ended 31-3-37, only prices and value rose. In 1938 and 1939, as has already been shown, export prices fell; G91 shows that export volume also fell.

The volume of imports fell much more during the depression than did import prices, to reach a trough in 1932. Both the value and volume of goods imported rose very rapidly after 1934, to reach a level in 1938 of more than twice the 1932 level. After this both value and volume fell. Import prices, as has already been seen, were relatively stable throughout the 1930's.

S2. The Balance of Payments Crisis.

The cause of the balance of payments crisis in the late '30s was chiefly the rise in the volume of goods imported - a

rise that had been constant since 1934, but which did not overtake exports in value till 1937. A lesser cause of the crisis was the fall in both volume and price, and so in value, of goods exported.

The Government's prescriptive measure to rectify the imbalance took the form of the Import Control Regulations of 11th May, 1938. The compiler of the 1941 Year Book in a section on PP222-224, notes that the aims of import controls were:-

1. Better distribution of limited sterling.
2. A reduction of imports without reducing national income.
3. To encourage the production within New Zealand of goods at that time being imported.

S4 of the Import Control Regulations was possibly the most important section. It stated:-

"The importation into New Zealand of any goods is hereby prohibited, except:

- (i) Importation pursuant to a license by the Minister as hereinafter provided;
- (ii) Importation pursuant to an exception granted by the Minister under clause 15 of these regulations."

By SS6 & 7 a prospective importer had to apply to the local collector of customs, or in some cases to the controller of customs, for a license to import. The Minister might grant, reject, or modify the application. (SS10&11). The 1941 Year Book records, in the previously quoted section, that in the granting of licenses preference was to be given, firstly to United Kingdom goods, and secondly to "essential commodities" - goods necessary as inputs for primary and secondary industries.

S15 of the Regulations stated:-

"The Minister may at his discretion from time to time by notice in the Gazette exempt from the requirements of a license under these regulations any particular goods or classes of goods --- and may from time to time by like notice withdraw any such exemption..."

The most important exemptions gazetted were those of the 7th December, 1938. The chief of these were:-

(1) Goods on board ship for export to New Zealand on 5th December, 1938.

(2) Goods ordered prior to 5th December, 1938, and imported not later than 31st December, 1938.

The main reason why this imbalance appeared, it has been suggested, was the increased volume of goods imported, and in a previous chapter it was suggested that the reason for this increase in the volume, and value, of goods imported was the greater relative rise in the prices of domestic, as compared with imported, goods. The result was not that people bought cheap imported goods in preference to dear domestic goods - in general there was little of this sort of competition - but high prices in New Zealand meant high money incomes, and people could afford to buy goods, including imported goods, that they could not previously afford to buy. The State could have rectified the imbalance by reducing the level of prices, but this would also have reduced the level of incomes, and so of real national income and employment. This was contrary to what the Labour Government had been elected to power to do, so instead it introduced import controls. An alternative method of reducing imports would have been to increase the rate of customs duty. This method lacks the exactness of import licensing, but does not force imports to follow an arbitrary pattern. As a short term method, import licensing is probably the better method of control, while customs duty increases is probably a better long term method. As the Government probably felt that the imbalance was only a temporary one, the method chosen was an appropriate one. In any case, the level of customs duty was not manipulated, and the total duty collected fell as imports fell. (See G25, and G97 & T72).

The extent of the imbalance can be best seen in Gs55 & 56, the former based on T46, and the second on T65. The total exchange of the Reserve Bank and of the banking system fell considerably from 1934 onwards, but the biggest fall was in the

last half of 1938, when approximately £N.Z. 20 m. of overseas reserve funds were absorbed. The fall was halted in the first half of 1939, but a build-up of reserves did not really start till late in 1939; and by the end of 1939 the level of overseas reserves was still very low.

### S3. An Analysis of Exports and Imports.

#### A. Exports.

##### (1) Exports classified according to type.

G92 and T66 set out the value of exports of goods of three main types: food, drink and tobacco; raw materials and articles mainly manufactured; and articles wholly or mainly manufactured. Food, drink and tobacco formed the greater part of New Zealand's exports, but over the decade other primary products gained in relative importance.

##### (2) Exports classified according to items.

G94 and T67 show the importance of New Zealand's six most important exports. The bar graph on the left of G94 shows the percentage that each of the six main exports contributed to New Zealand's total export income. Although butter on average contributed a constant amount, it tended to fluctuate in importance from year to year. Wool fluctuated greatly in relative value, but over the decade became slightly more important. Cheese on the other hand became of less relative importance. Sheep skins and pelts, and bullion, were of only minor importance. By the end of the decade the economy had become more dependent in the sense that these six exports accounted for a slightly increased percentage of total receipts, while three of these exports, which had provided 68.39% of total export receipts in 1930 accounted for 75.14% in 1939, having provided 76.64% of export income in 1936.

The index numbers graphed on the right of G94 show the absolute, as opposed to the relative, increase in value, and also in volume, of the six most important exports. The well established theory of the back bending supply curve for farm

produce during a depression, and the equally irrational behaviour of the supply curve during the reflation, is illustrated by all the volume lines. It is interesting to speculate that, had the volume exported not fallen in 1934, and so compounded a fall in export prices, possibly 1935 would not have been so bad a year as it was, and the depression might have been over by the time the Labour Government came to power. It is also possible that, had not the volume of butter and wool exports fallen in 1938 for the former and 1937 for the latter, there might not have been so great an effect upon business expectations of the decline of export prices, as outlined in the previous chapter.

### (3) Exports classified according to importing country.

The United Kingdom was, throughout the decade, the major importer of New Zealand exports, as G93 and T68 show. At the same time, there was a relatively greater contraction in exports to other countries during the depression, and a relatively greater expansion of exports to other countries during the reflation, than to the United Kingdom; though the exports to countries other than the United Kingdom were at all times of small absolute importance. It should be noted, however, that it was chiefly due to the fall in exports to these other countries that total export receipts fell in 1938. Seeing that the volume of goods exported fell only slightly, however, it is probable that there was some swing in volume away from these other countries to the U.K. Hence it would seem probable that the level of money national income and so of prices in the U.K., rather than the level of world prices and income, was the factor that had most effect upon the marginal efficiency of capital in New Zealand, and so on the level of investment, real national income and employment, in New Zealand.

### B. Imports.

#### (1) Imports classified according to type.

Exports, it will be remembered, were composed mainly of food, drink and tobacco, with other primary industries of lesser though growing importance, and manufactured goods of

little importance. Imports, as shown by G95 and £69, were composed mainly of manufactured goods, with food, drink and tobacco of secondary importance, and raw materials and articles mainly unmanufactured of very small, though growing, importance throughout the decade. The value of the two types of imports of lesser importance was relatively stable - it was manufactured goods that fluctuated violently in value during the '30s.

(2) Imports classified according to items.

No single import stands out as being of prime importance, nor were there three or four imports that accounted for almost all imported value, as was the case with exports. T70 sets out the relative importance of a large number of imported items, or groups of items. Imports of materials for building and construction became relatively more important after 1934, while other materials became of lesser importance. Producers' equipment, however, especially for commerce and industry, almost doubled in importance in the six year period 1934-39. Consumers' goods generally either just held their position, or lost relative importance.

(3) Imports classified according to the country of origin.

As can be seen from G96 and T71, although the United Kingdom was the greatest single exporter of New Zealand imports, it did not predominate as it did in the field of New Zealand exports. Throughout the '30s the U.K. supplied about 50% of New Zealand's imports; the total supplied by British Commonwealth, possessions and protectorates etc., rose fairly evenly from 68.77% in 1930 to nearly 77% in 1940. Otherwise, there was a considerable amount of stability in the relative importance of imports from various countries exporting to New Zealand.



CHAPTER IX. SECTORS IN WHICH STATE INTERVENTION TOOK THE  
FORM OF STIMULATION.

Sectors in which State intervention took the form of stimulation included all the primary industries, of which farming, mining, forestry and fishing will be dealt with here; secondary industry; and building. These are the "productive" sectors - the sectors that provide the goods, and to a considerable extent, determine the extent of the services that go to make up national income. Hence the output, prices and employment of these sectors are of vital importance to a reflationary policy. Yet in a modern mixed economy, the State is debarred from intervening directly in these sectors. Its intervention can only take the form of stimulation. This stimulation may be of two sorts:-

Firstly, there is indirect stimulation, through the manipulation of the quantity of money in circulation, and of the rate of interest, and attempted manipulation of the marginal efficiency of capital, and the rate of savings and investment. These have all been discussed in previous chapters; it remains only to be noted that that intervention through prescription in the sphere of money and banking, savings and investment, prices and overseas trade, was undertaken not as an end in itself, but in order to create an economic climate such as would stimulate productivity and employment in the productive sectors.

Secondly, there is direct stimulation - measures taken to change the course of production and employment in one particular sector, rather than in the whole of the economy. It is this second type of stimulation that will be studied in this chapter.

FARMING.

The Acts of Parliament which will be studied in this section are: The Wool Industry Promotion Act, 1936; The Agricultural Workers' Act, 1936; Mortgagors and Lessees Rehabilitation Act, 1936; The School of Agriculture Act, 1937; and the Primary

Products Marketing Act of 1936, and the 1937 amendment to this Act.

# S1. Productivity.

## A. General Farm Productivity.

The importance of farm produce in the total value of goods produced can be seen in T2 and G3. As can be seen from this table and graph, agricultural produce very nearly maintained its value throughout the 1930's, and so its relative importance increased during the depression, to fall again during the reflation. The value and relative importance of pastoral production fell steeply till 1933, then rose steeply till 1937, to fall again till 1939. The produce of dairy poultry and bee farms fell in value till 1932, then rose again, but in such a way as to maintain the relative importance of this group throughout the decade. Throughout the decade, farms produced goods valued at between 50% and 60% of the total goods bill.

G98 and T73 set out more clearly movements in farm income, and also show indexes of volume and prices. The relative stability in agricultural income that has already been noted is seen to be due to fluctuations in price and volume which, probably more by accident than design, tend to compensate each other. The fluctuations are not great, probably due to agricultural products being necessities; and also, the market was a local one.

Unlike the prices for agricultural produce, the prices of pastoral produce and of dairy, poultry and bee produce, did not regain during the 1930's their 1929 level; but in both cases the value indexes exceeded in 1937 the 1929 level, due to large increases in output.

Although the trends changed almost every year, there is nothing to suggest that the Labour Government's stimulative policy, either direct or indirect, had any effect upon any of the indexes graphed on G98. A comparison between this graph and G89, however, suggests that export prices had a considerable

effect upon the price and value level of pastoral, and dairy, poultry and bee products, and upon the prices and value levels of total farm income. In arriving at this conclusion, graph (1) on G89 should be compared with "Pastoral Produce" on G98; (2) and (3) on G89 compared with "Dairying, Poultry and Bees" in G98; and (4) in G89 compared with "All Farm Income" in G98.

#### B. Farm Productivity Analysed.

Production in agricultural farming, pastoral farming and dairying etc. will now be studied separately. The distinction between the three types of farming has at times to be an arbitrary one, partly because some figures are hard to allocate accurately, and partly because most farms in New Zealand are mixed farms.

##### (1) Agriculture.

G99 and T74 set out the area sown in the main crops grown in New Zealand. The area bracketed "B" covers agricultural, as opposed to pastoral, crops. The trend was for the area sown in agricultural crops to fall after 1933, with the decrease affecting mainly wheat and oats. The decline in these two crops may have been partly due to the rise in profitability of pastoral and dairy farming, but was also probably in part due to the high risk of crop failure, and the drain upon the fertility of the land, associated with wheat and oat farming. This suggestion is supported by T75, which shows yields per acre, not only for wheat and oats, but also for barley, maize, peas and linseed. The stability of maize yields stands out among fluctuations in the yields of other crops, with generally bad seasons in 1931-2, and 1934-5.

The lack of decrease in the area harvested for grass seed, (G99) was probably due to the demand from dairy and pastoral farmers for grass seed.

##### (2) Pastoral.

The main type of pastoral farming in New Zealand was sheep farming. As a form of direct stimulation to sheep farming and the woollen industry, the Wool Industry Promotion Act, dated

October 31st, 1936, was passed. S3 of this act established a New Zealand Wool Publicity Committee, consisting of a New Zealand Government representative, and four wool growers' representatives, with the director general of agriculture and the secretary of the D.S.I.R. as associate members. S9 sets out the two principal functions of the Wool Publicity Committee as follows:-

"(a) To promote the case of New Zealand wool, in existing or new markets, by such methods of publicity, or other means as commend themselves to the committee;

(b) To promote, by way of subsidy or otherwise, scientific or industrial researches in relation to wool or sheep, with a view to the improvement of the quality of New Zealand wool, or the increased production thereof, or the discovery of new or improved methods of utilising it, or generally in connection with the wool-production industry."

To finance the Committee, S10 placed a small levy on all wool sold.

This Act was probably intended to be a long run measure, plus a short run psychological shot-in-the-arm for the sheep farmers and the wool industry. Whether it had any short run effects is doubtful, and war demands for wool probably rendered its long run purpose redundant.

G101 and T77 show the total area of land under cultivation in New Zealand. As can be seen, most of this area was in pasture. The area in pasture did not change much during the decade, while the increase in the non pasture area was due mainly to the increased areas planted in plantations. The area in pasture would not all have been for pastoral farming - much of it would have been on dairy farms.

G100 and T76 show livestock figures; the sheep and lamb figures being relevant to this section. G100 shows the percentage increases over the previous year, therefore a straight rising line represents a constant compound rate of increase, and vice versa. The line for sheep, including lambs, as at

30th April in each year, falls steadily till 1933. This fall was due to the increased number of sheep slaughtered each year till 1932, and lambs slaughtered till 1933, as G108 and T83 show. This increase in slaughterings was probably due to the slightly better export price index for meat than for wool, which prevailed till 1933 (see G89). Similar correlations can be traced between G108 (lambs and mutton), G100 (sheep and lambs as at April 30th), and G89 ((2) & (3)). This illustrates again the importance of overseas prices upon the economy of New Zealand. The fall in sheep shorn until 1933-4, and the subsequent rise in number (G100) can also be traced to changes in the numbers of sheep slaughtered. The increase in the number of lambs tailed each year from 1931 onwards may indicate an increase in ewe fertility, or it may indicate a more general acceptance of practice of tailing lambs. The huge increase in the number of lambs shorn till 1937 indicates the cheapness of farm labour and the increase in wool export prices between 1933 and 1937. Lambs require a lot of shearing time for little wool, and the more or less constant numbers shorn after 1937 may indicate a rise in the cost of farm labour relative to export prices, or it may merely indicate that near the total number of lambs were being shorn.

Although there appears at first sight to be a correlation between the quantity of wool exported, as shown by G102 and T78, and the export prices for wool, as shown by G89(3), in fact a close examination of the two graphs shows no real correlation to exist. What can be noted is that, throughout the decade, total production and exports of greasy wool increased in quantity, with production being more stable than exports, and fluctuations in stocks of wool held in New Zealand occurring almost every year. As G102 suggests and T78 shows, New Zealand's consumption of wool was negligible.

### (3) Dairying.<sup>(1)</sup>

The yearly percentage increases in the number of dairy cows

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(1) There is insufficient information available to deal with bees and poultry. In any case, poultry and bee keeping were of minor importance.

are shown on G100 and T76, while the cow population is shown on G103 and T79. Although there appears to be a discrepancy between the two sets of figures, they both indicate that the increase in the number of cows tailed off as the decade ended. That the increase was considerable till 1935 is also suggested by both series. The tailing off of the increase in the cow population may have been due to the increasing price level, in accordance with the backbending supply curve theory, or it may have been due to the fixed amount of pasture land having reached its maximum carrying capacity.

G99 and T74 suggest that, throughout the decade, the area cultivated for pastoral crops, part of which would be used for dairying, was much more stable than the area cultivated for agricultural crops. This, and the relatively stable level of beef slaughterings, (G108 & T83 - which probably included cows slaughtered) would suggest that farmers found it more profitable to keep their cows and milk them rather than slaughter them for meat. G89 (1)&(2) bears out this suggestion.

Pigs are generally kept on dairy farms, to drink the skim milk after the cream has been separated. G99 and T74 show that the number of pigs kept varied in much the same ratio as did the dairy cow population, though at a faster rate. This faster rate may have been due to less bobby calves being kept, for as G108 and T83 show, not only did the number of pigs slaughtered increase till 1937, but so did the number of bobby calves slaughtered. (Bobby calves are slaughtered soon after birth, whereas pigs are kept for at least six months.)

G104 and T80 set out the level of dairy production. Although there may have been some substitution from butter to cheese between 1932 and 1934, the production of cheese fell again and maintained a fairly constant level throughout the decade; while butter production rose steeply, though at a decreasing rate, till 1937, after which it fell again, though not to its 1931 level. There are two causes of these movements: firstly, as has already been seen, the cow population followed a similar movement; while secondly Gs105&106 (Ts 81&82) show

that not only did total butterfat production also follow a similar movement, but so did butterfat production per cow. Although the fall after 1937 in these two latter series can be explained as an easing off in the intensity of production, in accordance with the back-bending supply curve theory, it can only be assumed that the fall in 1935 was due to the same climatic conditions that caused a fall in wheat, oats etc. yields in the same year. (See T75). A fall in farm output in 1935 has been noted in several places in this chapter, and it must be admitted that the fall in economic activity in most sectors of the economy in 1935 may have been in part due to this lower level of farm production. There was a similar contraction of farm output after 1937, again at a time when there was a general lack of economic growth. This modifies slightly, but does not alter the contention, that the level of foreign, particularly British, money national income, as expressed in prices for New Zealand exports, is the principal determiner of the level of investment, and so of real national income, and employment in New Zealand.

Throughout this study there has been nothing to suggest that the Labour Government, by either direct or indirect stimulation, increased farm production. At the same time, there appears to be no reason to lay at the feet of the Labour Government the fall in farm production after 1937.

## S2. Farm Employment.

Two classes of workers are employed on farms; those who own and work on their own farms, and those who work on farms that they do not own. The former did not become unemployed in the early '30s unless their properties were possessed by mortgagees. Although this did happen on occasions, legislation was passed early in the decade to discourage this. It is probable, however, that the employment of labourers on farms fell greatly during the depression, although it is uncertain how important employed labour was on New Zealand farms. In Chapter I schemes whereby farmers could get subsidised labour for

developmental work and the eradication of noxious weeds were mentioned. In addition there were several schemes for the resettlement of abandoned farms, of which there were few, and for the taking up by semi-unemployed persons of ten acre lots on which to grow their own food. The following are the only known figures for employment relief on farms (Year Book 1938, Page 808):

<u>Total Nos.</u>	<u>Dec.</u>	<u>June</u>	<u>Dec.</u>	<u>June</u>	<u>Dec.</u>	<u>June</u>	<u>Nov.</u>
<u>Under Farm</u>	<u>1932</u>	<u>1933</u>	<u>1933</u>	<u>1934</u>	<u>1934</u>	<u>1935</u>	<u>1935</u>
<u>Schemes:</u>	12,018	13,487	12,791	10,508	8,262	5,497	5,548

The fall in numbers being supported in their employment on farms by the Unemployment Fund was probably due to these employees being taken on full time and fully supported by the farmer as his production levels rose.

The chief Labour Government measures designed to effect employment on farms were embodied in the Agricultural Workers' Act of 1936, which applied mainly to workers on dairy farms. This act laid down specifications as to accommodation, and forbade the employment of persons under the age of 15 years. The rates of pay of farm hands were to be set by order in council, taking into account the level of guaranteed prices. Presumably an increase in wages was intended.

Hours of labour are difficult to regulate for farm workers, especially for those on dairy farms. The 1936 act did not restrict the hours of labour, but made provision for compensatory holidays. Before 1940 this act was extended with modifications to orchard workers, while the number of holidays, containing an element of compensation for long hours worked, were prescribed for wool, meat and grain farm workers.

Labour Government farm employment policy can be said to have been designed to spread the existing amount of work among a greater number of workers, and to improve the conditions of work of the farm worker.

### S3. Investment on Farms.

The state entered into the field of farm finance as early as 1894, when the first State Advances Act was passed. In 1927,



with the Rural Intermediate Credit Act, the Government lent short term to farmers. During the early '30s, the Unemployment Board subsidised employment upon developmental work on farms, and gave financial assistance where milk handling equipment was being renovated. This was direct investment by the State in farming, and further provision was made for this sort of investment in the 1934 Agricultural Emergency Powers Act, which made provision for the spending of public monies upon the reconstruction of dairy factories, the eradication of disease from dairy herds, and the general improvement of conditions in and about dairy farms.

In 1931 the Mortgage Relief Act was passed, empowering the Court to reduce the rate of interest chargeable under a mortgage, while by the National Expenditure Adjustment Act, interest rates and rents were reduced by 20%, though not to below 5%, as from April 1st, 1932. The 1931 Mortgage Relief Act also retained mortgagors in possession of their properties notwithstanding default in payment of principal or interest, and made provision for the adjustment of rights and obligations under a pre-existent mortgage. The Rural Mortgagors Final Adjustment Act, 1934-35, made provision for the permanent adjustment of liabilities and interest chargeable upon rural property, so that they bore a more reasonable relationship to the capital value of the land.

Pre-1936 Government investment in farms then, had been of two types; the Government had lent to farmers, or subsidised investment projects; and it had interfered with the terms of private investments. After 1936, the Labour Government lent to farmers through the S.A.C., and for some time the various subsidy schemes on developmental work remained open. The chief new measures introduced by the Labour Government were embodied in the Mortgagors and Lessees Rehabilitation Act, of 1936, and the 1937 School of Agriculture Act. In addition there was indirect stimulation through the Governments fiscal policy, as dealt with in previous chapters.

The 1937 School of Agriculture Act was a long term measure to increase farm production, firstly through research, and secondly through the training of farmers and farm specialists. To do this, the Act created a School of Agriculture, under the auspices of the University of New Zealand. The School was to consist of the Canterbury Agricultural College, which had been founded in 1930, and the Massey Agricultural College, which had been founded in 1926. Any extra money that may have been spent through these institutions as a result of the founding of the School of Agriculture would represent investment by the State in the farming community.

The Mortgagors and Lessees Rehabilitation Act, dated 1st October, 1936, was in part a consolidation and restatement of previous law. It applied to all mortgages and agreements to lease, not only those concerning farms. S2 sets out the general purposes of the Act, which were:-

(a) To allow farmers to retain their land, and not to have to have to pay more, by way of rent, or mortgage repayment than the farm could economically bear; nor were they to be liable for mortgage debts greater than their real assets.

(b) To allow home occupiers to retain their houses, at a reasonable rate of rent, or mortgage repayment, and not to be liable for mortgage debts greater than the value of their houses.

(c) To in general make the same allowances for mortgagors with securities other than houses and farms.

The Act applies to mortgages and leases entered into before the passing of the Act and still in force; and mortgages and leases entered into before the passing of the act, and renewed after it. (SS6&7) S10 set up a Court of Review, with three members - a Judge of the Supreme Court, who was to be the Judge of the Court of Review, and two other members; all three members to be appointed by the Governor General. A majority decision would require the concurrence of the Judge and at least one member (S19). Section 24 provided for the setting up of three member Adjustment Commissions. The Mortgagor, lessee

or guarantor could make application to the Court of Review for an adjustment of liabilities; but if he did not make application, the mortgagee, lessor or guarantor could make application only if the mortgagor or lessee was in default. (SS29&30) The application had to be made to the local adjustment commission, (S35), which would hear the evidence for and against the application, obtaining legal and specialised advice if need be, (S36). It appears from the Act that the commissions main job would be to establish the value of the security, and then to reduce the liabilities of the applicant to that level, the balance being termed an "adjusted debt". (SS37&42) By SS43 and 45, the commission could also vary any of the terms of the mortgage or lease if it thought fit. In the case of a rent, the commission was to determine what was a fair, "basic" rent, based on the value of the property, and its earning power. If the actual rent was higher than the basic rent, the former was to be reduced, while arrears in rent could be written off as an adjusted debt (S44) The commission could order the sale of property the subject of an application, which it felt that the mortgagor should not be in the possession of. (S46) In general, adjusted debts were never paid, but the land subject to adjusted debts could not be sold before 1/1/41. (SS49&82).

There are no published figures as to the number of mortgagors and lessees who took advantage of this Act, nor of the total amount of adjusted debt written off. It is known, however, that the value of land and improvements, the securities for most farm mortgages, fell from 1931 to 1937, after which they rose again. (See G109 & T84) At the same time, the unimproved value of land, which is usually preferred to improvements as security for mortgages, fell steadily throughout the decade, to be in 1940 only 81% of the 1929 value. This fall in value may have reduced the securities on existing mortgages to a level where mortgagors could take advantage of the Mortgagors and Lessees Rehabilitation Act; at the same time, this fall in value must also have discouraged further investment in farming.

There are similarly no published figures for total invest-

ment in farming; there are, however, several indicators as to the level of this investment.

The first of these is the area topdressed each year. Topdressing is one of the main items of investment by farmers. At the same time, it is usually financed by the farmers themselves, hence in a time of depression the area topdressed tends to fall, while during a boom it will rise. The rise during the reflation is partly due to the accumulated need for pasture replenishment, due to the fact that farmers can once again afford to invest in their own land, and partly due to a desire to increase production. During the early thirties the area topdressed fell, while the production off farm lands rose. This created a danger of severe pasture exhaustion which the Coalition Government endeavoured to alleviate by reducing and subsidising the carriage of lime and superphosphate. G107 and T85 do not suggest that these measures caused an increase in the area topdressed. The area topdressed did not start to increase till export prices started to rise, and the area topdressed tended to fall, though did not actually do so, when export prices fell again late in the decade.

A second indicator of the level of investment in farms is the changed mechanisation of farms. The numbers of the main types of farm machinery in use are shown in T86. The big increase in 1931 was probably due to orders during the previous year. 1937 generally shows a bigger increase than do most other years. Throughout the decade milking machines increased in number fairly steadily, while the number of cream separators rose rapidly till 1934, then the increases tailed off, to give way to a fall in 1939. This pattern was probably due to substitution between dairying for butter and dairying for cheese. The low export prices for wool are reflected in the numbers of shearing machines and plant, neither of which increased greatly till 1935, after which the rise in number was rapid. Although the number of agricultural tractors increased throughout the decade, the rise after 1934 was very rapid, and

this phase of mechanisation appears to have been fairly independent of export price influence. The reason may be that there was a considerable need for tractors to bring about the increased production of the '30s, or tractors may have become the symbol of the successful farmer. In any case, the increased use of tractors was in addition to, not in place of, the use of horse teams, for as G100 and T76 show, the number of horses kept fell less than 10% over the whole decade. Similarly, the large rise in the number of electric motors used represents new productive power, for, although the number of internal combustion engines did not rise greatly, it did not fall. Investment in farm machinery, then, shows two trends - machinery with a special use tended to vary in quantity in accordance with export prices, while machinery of general use, such as tractors and electric motors, tended to increase irrespective of fluctuations in export prices.

The last indicator of farm investment to be dealt with is the level of trading bank advances to farmers. This has already been dealt with in Chapter VI. As was seen there, T45 shows that, while trading bank advances to farmers rose between June 1936 and June 1939, the proportional rise was less than the rise in total advances. While this would suggest that investment in farms was possibly at a lower level than the general, probably low, level of investment, it has already been mentioned that advances by trading banks are not necessarily invested.

Although these indicators of the level of investment show that there was some increase in investment in farming during the second half of the decade, there is nothing to suggest that this investment was of large proportions, nor that it was influenced by Government policy. There is some evidence of its being influenced by the level of export prices, however. This is what would be expected in this sector, even if it were not true of the whole economy - for the income of the farming sector of the economy is likely to be more directly affected by the level of export prices than is the income of any other sector of the economy.

#### 54. The Marketing of Farm Produce.

There are two markets for New Zealand produce - the internal market and the external market. The relative importance of each can be seen from <sup>8)</sup> T97. Two conclusions can be drawn from T87 - firstly, that throughout the 1930s, the export market was more important than the internal market, and secondly, that by the end of the decade, the export market was relatively more important than at the beginning of the decade, though it lost some of its relative importance in the trough of the depression.

The external marketing of farm products was in a state of change when the Labour Government came to power, some farm products being marketed privately, usually not by the farmer but by stock and station agents etc.; while other agricultural products were marketed by semi-official organisations. For instance, of New Zealand's four most important exports, meat had since 1922 been exported through the Meat Producers Board, which had "... power to act as the agent of the producers' in respect of the preparation, storage and shipment of meat beyond New Zealand." (From the preamble to the Act). Wool was marketed privately, usually through auctions held in New Zealand, at which foreign buyers bid in competition with each other and with New Zealand buyers. As for butter and cheese, the Dairy Produce Control Board was established in 1923, but did not attempt to market dairy produce till it was reorganised as the New Zealand Dairy Board in 1934. In fact, due to the passing of the 1936 Marketing Act, it never did market dairy produce till after the war. Some of New Zealand's minor exports were subject to Boards of Control, some of which marketed the produce, while others were merely concerned with quality. In 1925 the Fruit Export Control Board was established, to increase the sales of fruit and to set standards of quality. This Board was suspended during the war, but was reconstituted as the New Zealand Apple and Pear Marketing Board in 1948. The Honey Export Control Board, established in 1924, was interested only in export quality, the marketing

of honey being done by voluntary organisations, till the creation of the State Marketing Department, when the export marketing of honey was voluntarily handed over to this Department. In 1932 wheat growers co-operated voluntarily to set up the Wheat Marketing Agency Limited, a company to which growers sold and from which millers bought. This scheme was consolidated as the Wheat Purchase Board in 1933, and under the Labour Government became the Wheat Committee in 1936, with control of wheat imports as well as exports, and of price. In 1933 the Poultry Board was established to provide efficiency of production rather than to expand the market, while in 1935 the Tobacco Board was established with the rather loose intention of correlating supply and demand and counteracting the effect of imperfectly competitive buyers.

In general, these Boards consisted of a majority of producers, and a minority Government representation. The government could direct policy to a considerable degree, however, by changing legislation, if need be.

The internal marketing of farm produce was largely in the hands of the individual supplier, although some of the producer boards concerned themselves with internal as well as external marketing.

As can be seen from this brief summary, the exporting of some farm products was organised and on at least a semi-official level before the Labour Government came to power; though possibly only the pre-1936 Wheat Board had as one of its main functions the stabilising of prices. It was with the idea of stabilising prices received by farmers, and so reducing to some extent the dependence of the marginal efficiency of capital upon overseas prices, that the Primary Products Marketing Act, 15th May 1936, was passed. The stated aim of the Act was to protect producers from fluctuations in price through State control of sales.

S4!.... established a Department of State, to be called the Primary Products Marketing Department...." S6 stated: "The principal functions of the Department shall be to make all

necessary arrangements with respect to:-

(a) The acquisition, on behalf of the Crown, of any primary products in accordance with the Act or in accordance with any other lawful authority which shall hereinafter be conferred.

(b) The marketing in New Zealand or overseas of primary products, whether or not such products have been acquired on behalf of the Crown."

In 1934 an Executive Commission of Agriculture had been set up, with the wide and loose powers to regulate and correlate the activities of the several boards concerned with the exporting of New Zealand farm produce. S8 of the Primary Products Marketing Act abolished this Commission, and transferred its functions to the Primary Products Marketing Department.

Although all primary products could be brought within the scope of the Act, its immediate aim was to regulate the marketing of dairy produce. To this end, S10 provided for the setting up, at the Reserve Bank, of a Dairy Industry Account, with unlimited overdraft accommodation. The proceeds from the sale of dairy produce were to go into this account, while it would be debited with payments to farmers for produce, and with the expenses of the scheme. (S12). Section 16 defines dairy produce as milk, cream, butter, cheese and allied dairy farm produce. All dairy produce for export would become the property of the Government as soon as it was placed on board ship - or sooner if the Minister so desired. (S18). Section 20 laid down that the prices to be paid by the Dairy Board to farmers were to be fixed by order in council, and were to be determined by the price level of the previous eight to ten years, with the following factors also being taken into account:-

(a) The necessity to maintain stability and efficiency in the dairy industry.

(b) The standard of living of dairy farmers in comparison with the general standard of living.

(c) The cost of efficient dairy farming.

(d) The cost to the Department of administering the Act.

(e) "Any other matters deemed to be relevant".



Section 20(5) continued:-

"Due regard having been paid to the several matters mentioned ... the prices fixed ... shall be such that any efficient producer engaged in the dairy industry under usual conditions and in normal circumstances shall be assured of a sufficient net return from his business to enable him to maintain himself and his family in a reasonable state of comfort."

SS21 and 22 made provision for the Act to be extended to cover New Zealand consumed dairy produce.

An amendment, late in 1937, to the Primary Products Marketing Act divided the Primary Products Marketing Department into two divisions - the Dairy Produce Export Division and the Internal Marketing Division - and made provision for further divisions if needed. The Internal Marketing Division could fix the retail price and/or margins on dairy produce, fruit, honey and eggs.

By a customs proclamation dated 11th May, 1938, the Internal Marketing Division became the sole importer of citrus fruit. This measure was intended to stabilise prices, and was reinforced on the 1st May, 1939, from which date all New Zealand produced lemons for resale could be sold only to the Marketing Department. Eggs for export were subject to a guaranteed price, while internal minimum prices for eggs were set. Honey continued to be administered through the Honey Export Control Board, though marketed through the Marketing Department; while the Kauri gum market was supervised by the Internal Marketing Division. Although the Marketing Act and the Marketing Department were modified in these and other ways, the main purpose of the Primary Products Marketing Department continued to be the purchase for export of New Zealand Dairy produce. The minimum price that the farmer would receive for his dairy produce, computed in accordance with the Act, was known as the guaranteed price. T88 sets out the guaranteed prices for the period 1936-7 to 1939-40. As can be seen, these prices rose in 1937-8 and 1938-9, but remained at their 1938-9 level in 1939-40. In fact, the guaranteed prices were exceeded in

each year, which would suggest that guaranteed prices were not inflationary in the late '30s, though they may have removed sufficient risk to bring about some increase in the marginal efficiency of capital.

Of the other major New Zealand exports, meat continued, under the Labour Government, to be sold through the Meat Producers Board, while to aid sheep farmers, the Wool Council was set up in 1936, to promote the sales of wool by advertising and research, but not by the creation of the floor price - this did not come till 1951.

#### OTHER PRIMARY INDUSTRIES.

The "other" primary industries which will be studied are Forestry, Fishing and Mining & Quarrying.

#### S5. Forestry.

The relatively small importance of forestry in New Zealand can be seen from G3 and T2. Forests in New Zealand are of two types: natural native forests, and man-made plantation forests, usually of deciduous trees. As was seen earlier in this chapter, nearly all the net amount of new land brought into production during the '30s was for plantations. (See G101 & T77). Even when the big increase in 1934-35 is ruled out, due to some State forests being included in the series for the first time, the area planted in forest increased by about 40% in the decade, with 1931-2 and 1937-8 being the years showing the biggest increases.

Forestry in New Zealand is carried on by the State, and also privately. There are no published figures available for forestry employees, but G110 and T89, showing output of timber, would suggest that employment probably fell considerably during the depression, and then rose rapidly till 1936, due mainly to increased output by the State. After 1936 the rise in output, and probably in employment, rose less rapidly, and what increases there were, were due almost entirely to increases in private production. T90 shows, however, that the area planted in

State forest fell at the same time as State timber output rose; hence the rise in employment in forestry between 1932 and 1936 may not have been as great as G110 suggested. In any case, there is nothing in any of the tables or graphs referred to so far in this section to suggest that activity, and employment, in forestry, increased greatly after 1936.

G112 and T92 seem to bear out this contention, for in 1938-9 and 1939-40 receipts and payments of the forestry industry fell greatly, with receipts beginning to fall a year earlier. The sudden rise in value of forestry assets and liabilities in 1938-9 and 1939-40 was probably due to a book entry; not only is a rise in the volume of assets inconsistent with what the other series of figures show, but the rise in value as shown is too steep to be due to any increase in material assets.

#### S6. Fishing.

Fishing was a fairly minor industry in New Zealand (see G3 and T2) and, as Gs113 & 114, and T93 show, it declined during the decade, at least in respect of the number of men and vessels employed. The biggest decline came in 1936. There are two possible reasons for this: men who were not fishermen by trade, but who may have turned to fishing during the depression, may have taken shore jobs as they became available after 1936; or there may have been a genuine decline in the fishing industry that put professional fishermen and their vessels out of work. After the big decline in 1936, there was an increase in the number of vessels and men engaged in part-time fishing, but a corresponding decline in the numbers engaged in full-time fishing suggests that the same men and vessels were responsible for the decline in one and the increase in the other.

#### S7. Mining and Quarrying.

(a) Gold Mining, Dredging, etc.

The rapid rise in the number of miners and the number of

claims, dredges etc. till 1933, and the continued rise till 1935, (see G115 & T94), was due to three factors: firstly, the lack of other employment encouraged men to pan for gold; secondly, the Government subsidised dredging and prospecting for gold by experienced miners; and thirdly, the price of gold more than doubled between 1930 and 1935. Similarly, the fall in the number of miners after 1935 was due to the improved employment opportunities, and the stable gold prices. Hence, the fall in employment in gold mining after 1935 can be taken as a sign of economic recovery, not depression. Despite the rise in the number of goldminers, the quantity of gold mined was in all years, except 1932, below the 1920 level, though the value of gold mined rose till 1935, due to the increase in prices.

(b) Coal mining. (See Gs 117, 118 & 119, and T95).

Although coal output rose again after 1933, employment in the coal industry did not really begin to rise until 1936. Presumably employment underground followed a similar pattern, because output per underground worker rose from 1931 to 1935. From 1935 onwards employment and output rose together, though neither had reached its 1930 level by the end of the decade. This was probably due to the increased output of electricity.

(c) The output of stone.

As T96 and Gs 120 to 124 show, the output of stone fell considerably during the depression, but employment in quarries did not. As a result, output per worker fell till 1933, and then rose, to reach a level in 1940 nearly 1/3rd higher than the 1930 level. To meet the heavy demand for stone between 1933 and 1938 over 100 new quarries were opened. Output in 1938 was 60% more than in 1930; after 1938 output fell slightly. The increased output was chiefly of road and ballast stone, and of agricultural limestone. The output of building stone had increased by nearly 1000 times the 1930 figure by 1937, but was always relatively insignificant, while the output of the relatively more important cement-limestone did not exceed the 1930 figure till 1938, and had risen only 34% above this figure by 1940.

Although of slight importance of itself, the output of stone, being a producers' industry, is an indicator of the level and direction of investment. Apart from limestone for agriculture, stone is used in investment that is not directly productive: roads, buildings, etc. G121 suggests that investment in "non-productive" assets rose very rapidly from 1933 till 1938, and then remained constant. A comparison between G121 and graphs and figures presented in Chapter VI indicates that investment in "non-productive" assets may have risen at a greater rate than did the general investment level, and therefore, that investment in "productive" assets may have risen at a lesser rate than did the general level of investment.

CHAPTER X.      SECTORS IN WHICH STATE INTERVENTION TOOK THE  
FORM OF STIMULATION - CONTINUED.

SECONDARY INDUSTRY.

S1.   New Zealand's Major Secondary Industries.

G3 and T2 show that secondary industry ("factory") was of some importance in the '30s, and that its relative importance became greater as the decade proceeded.

Figures have been published annually in the "Statistical Report on the Factory and Building Production of the Dominion of New Zealand" for approximately 85 industries. Not only is this number of industries too great to deal with here, but many of these industries are of minor importance. A list of 22 major New Zealand Industries has been drawn up for use in this section. The basis of inclusion in this list has been:

(a) All industries providing 1% of industrial employment in 1929;

(b) Plus any other industries providing 1% of industrial employment in 1939, if their rate of growth warranted their inclusion. (This included hosiery manufacture, concrete blocks, pipes and fibrous plaster making, and electrical engineering.);

(c) Less industries providing 1% of industrial employment in 1929, but not in 1939, if their lack of growth and small output in 1939 warranted their exclusion (e.g. flax milling).

The resultant list of 22 industries, together with their respective employment figures for 1929 and 1939 is as shown on the next page. Although the name of each industry is set out in full on the next page, for the rest of the chapter they will be referred to in an abbreviated form for convenience.

# I N D U S T R Y

## I. CONSUMER'S GOODS.

### A. Food.

Meat Freezing and Preserving.  
Butter, Cheese and Condensed Milk Manufacture.  
Biscuit and Confectionery Making.  
Brewing and Malting.

## Employment, 1929.

%      Numbers

7.4      6139  
5.1      4228  
3.3      2719  
1.2      987

## Employment, 1939.

%      Numbers

7.6      8282  
3.6      3859  
3.2      3496  
1.1      1215

### B. Clothing.

Clothing Manufacture.  
Boot and Shoe Making.  
Hosiery Manufacture.  
Woollen Milling

9.5      7852  
2.8      2307  
0.9      729  
3.0      2478

12.1      13201  
4.0      4384  
1.2      1259  
2.7      2980

### C. Services.

Gas Making and Supply.  
Electricity Generation and Supply.  
Printing, Publishing and Bookbinding.

2.2      1796  
3.0      2459  
10.0      8255

1.7      1889  
3.7      3991  
7.5      8120

## II. PRODUCER'S GOODS & CONSUMER DURABLES.

### A. Building Materials.

Woodware and Turnery Manufacture.  
Sawmilling, Sash and Door Making  
Lime Crushing or Burning and Cement Making.  
Brick, Tile and Pottery Making.  
Concrete Pipe or Block Making, and Fibrous Plaster Making.  
Furniture and Cabinet Making.

1.3      1112  
8.9      7381  
1.1      928  
1.4      1156  
0.9      780  
3.3      2774

1.4      1504  
7.9      8487  
1.1      1195  
1.1      1186  
1.1      1185  
3.0      3287

### B. Engineering Materials.

Tin Plate and Sheet Metal Working.  
Engineering, Iron and Brass Founding, Boiler Making and Nail Making.  
Electrical Engineering.  
Dairy and Agricultural Machinery and Implement Making.  
Coachbuilding, Motor and Cycle Engineering, etc.

1.8      1494  
5.7      4688  
0.3      235  
1.2      963  
8.5      7033

2.0      2147  
5.0      5468  
1.3      1356  
1.1      1189  
8.4      9092

## TOTAL MAJOR INDUSTRIES:

82.7      68493

81.7      88772

S2. Organisation of and Investment in Secondary Industry.

(1) The number of establishments.

T97 and G125 show the number of establishments engaged in industrial production. The overall trend during the decade was one of growth, with a slight fall in 1932 that was partially remedied by an increased rate of growth in the number of establishment between 1934 and 1936. T97 shows that apart from those engaged in clothing and hosiery manufacture, the number of establishments engaged in the production of consumers' goods either fell, remained stable or increased insignificantly between 1929-30 and 1939-40. At the same time, the number of establishments engaged in producing producer's goods and consumer durables over the same period rose in every case, except in bricks, tiles and pottery manufacture, although the increase in the number of establishments doing tin plate and sheet metal working was insignificant. Some of the increases were very great - the number of establishments engaged in the production of lime and cement, concrete blocks, pipes and fibrous plaster, and dairy and agricultural machinery, all rose by approximately 100% over the decade, while the number of electrical engineering establishments more than trebled. These four groups of establishments were of minor absolute importance, however. The producer industries with the greatest number of establishments in 1930 - woodware and turnery; sawmilling, sashes and doors; furniture and cabinet making; engineering etc.; coachbuilding, etc. - all had between 30% and 15% more establishments by 1940.

Apart from the secular difference between the rate of growth of the number of establishments engaged in consumer industries, no clear pattern emerges from the figures presented in T97. Although some series show accelerated growth after 1936-37, (e.g. concrete pipes etc., coachbuilding etc.,) others show a retardation of growth after 1936-37 (e.g. woodware and turnery; dairy and agricultural machinery etc; lime and cement); while some, with a previous rate of growth, show an



actual decline, (e.g. printing etc.). These conflicting results, coupled with the fact that no definite change in trend can be found in most of the series, suggests that the advent of the first Labour Government had little effect upon the number of industrial establishments.

(2) The organisation of establishments.

G135, based on T98, shows that the greatest increase in the number of industrial establishments, both absolutely and relatively, occurred in private and public companies, though the increase in private company establishments was greater than that in public company establishments. G133 (T99) shows that the increase in the number of public company and co-operative industrial establishments was not accompanied by an increase in the number of companies registered. This would suggest that the existing companies expanded the number of their establishments during the reflation. There was, however, an approximately corresponding increase in the number of private companies and in the number of establishments owned by them. Private companies are of two types - those owned by virtual sole traders, and those that are the wholly owned subsidiaries of public companies. Hence, although the increase in the number of private companies may have meant an increase in the number of small, and possibly uneconomic firms, part of the increase in the number of private companies may have been due to public companies using the limited liability legislation to isolate the risk associated with new ventures.

Figures presented in T98, and graphed in G136, show that employment in industrial establishments increased by 58% between 1932 and 1940. This increase was due largely to the 86% increase in employment by private companies, which by 1940 employed nearly half of the total number of labourers employed in factories. Employment by individuals ceased to rise significantly after 1937, as did employment by partnerships and co-operatives. Employment by public and private companies did not cease to increase till 1938, and the cessation did not

occur at all in the case of factory employment by Municipal and Government authorities. The falling off of industrial employment seems to be in keeping with the general falling off of increased employment in the late '30s.

The overall output of factories increased more from 1932 till 1940 than did overall employment, again with private company output being the only series to exceed the general average; though whereas private companies accounted for nearly half the industrial employment in 1940, they produced only one third of the goods. (See G137 & T98). In general, the presumably smaller concerns (those owned by individuals, partnerships and private companies) increased in efficiency more during these nine years than did their bigger rivals with the exception of co-operative companies. The output of all groups, with the exception of Government and Municipal undertakings, ceased to rise in 1939.

### (3) Investment in industrial establishments.

The only industrial investment figures available are for investment in industrial joint stock companies, and these are shown in Gs132 & 133, and T99. Although private companies may have been numerically greater, and have provided 50% of industrial employment in 1940, they had a combined capital in the year ended 31/3/40 of £22.4m. as compared with £34.8m. capital of public and co-operative companies. During the '30s, however, the paid up capital of private companies did increase more than did the paid up capital of public and co-operative companies. Share capital was more important than loan capital for both classes of company, though loan capital became of increasing importance till 1939, even if overdrafts are excluded from the post 1935-36 figures. This increase in the importance of loan capital may indicate a continued reluctance of investors to invest their funds in unsecured shares, often with no guaranteed rate of return. Whereas the total paid up capital of private companies started to rise from 1935 onwards, public company capital did not rise till the year ended 31/3/38. Unlike the other series of figures which have been presented in

this section, this series suggests that there was no retardation, at least of investment, in 1938 and 1939. The capital of neither class of company increased to any great extent, however.

T45 records an analysis of trading bank advances. Although this analysis does not show advances to individual industries, it does show that advances to industry in general rose by more than did the overall level of advances, with large increases in the level of trading bank advances to dairy companies and factories, and to woollen mills.

Two facts have stood out in this section - firstly, the predominant part that private companies and their establishments, employment and production, played in New Zealand secondary industry; and secondly, the continued level of activity of State and Municipal industrial undertakings during 1939, when most other industry appears to have expanded at a less than previous rate.

### S3. Employment in Secondary Industry.

#### A. The Level of Employment.

Industrial employment is set out in G127 and T100, which show an increasing rate of increased employment from 1933 till 1937, after which industrial employment increased at a decreasing rate till the outbreak of war. T100 and G138 show that, while employment in all major industries, except butter, cheese and condensed milk manufacture and printing etc., increased during the '30s, employment in producer and consumer durables increased relatively less than did employment in consumer industries. This is in direct contrast to the change in the number of industrial establishments. Whereas 1932 was the year with the fewest number of people employed in consumer industries, 1933 was the corresponding year for producer and consumer durables industries. This is what would be expected, with demand for producers' goods being a derived demand. Employment in producer industries fell more during the depression than did employment in consumer industries, and so

the rate of increase in the former was greater than the rate of increase in the latter during the reflationary period. Employment in both classes of industry became stabilised in 1938 and 1939. Of the consumer goods industries, the clothing group showed the greatest increase in employment over the decade, and the services, despite the influence of electricity generation and supply, showed the least increase. Of the two producer and consumer durables industrial groups, engineering materials shows a secular gain over building materials, though was slower to recover from the depression. The individual industries with the most greatly increased employment between 1928/29, and 1939/40, as shown by T100 and G141, were electrical engineering (511% increase); Hosiery (130%); Clothing (76%); Electricity generation and supply (66%); Boots and Shoes (63%); Coach-building, etc. (53%); Tin Plate and Sheet Metal (51%); Woodware and Turnery (45%); and Dairy and Agricultural Machinery etc. (44%). Employment by all other major industries increased by less than the overall average increase. Employment in some of the minor industries increased relatively greatly, although they remained absolutely of minor importance. Chief among these were - (increases shown between 1929-30 and 1939-40, not 1928-29 and 1939-40) paint and varnish manufacture (276% increase); bag and sack making (212%); pumice products preparation (184%); sail, tent and oilskin making (170%); electroplating (148%); paper bag and box making (114%); and fruit preserving and jam making (105%).

A study of G141 reveals that all but 5 of the industries graphed suffered a fall in employment,<sup>or a</sup> retarded rate of growth of employment, over the two years ended 31/3/38 and 31/3/39. The exceptions are electricity; printing etc.; woodware and turnery; tin plate and sheetmetal working; and electrical engineering.

A study of the monthly employment figures for the major industries for the period 1935-1939 (not included here) reveals violent seasonal fluctuations in the meat freezing and

preserving industry, which do not appear to become any less during the Labour Government's term of office. Seasonal fluctuations in employment are also found in the butter, cheese and condensed milk manufacturing industry. The cause of these fluctuations was not changes in demand for the finished product, but changes in supply of the raw materials. Seasonal fluctuations are also found in the employment figures for the lime and cement industries; and in the bricks etc. manufacturing industry; with the former reducing employment over the mid-summer period, and the latter reducing employment during mid winter. Otherwise, there are few signs of seasonal unemployment. This does not mean that employment was constant from month to month; in some cases monthly employment figures fluctuate considerably, but erratically rather than seasonally. This erraticness made it impossible to determine from the monthly employment figures the month or months when employment patterns changed, as was originally intended.

#### B. Other Matters Related to Employment.

##### (1) Unionism.

The organisation of employers and employees into unions is shown in T101 and Gs 128 & 129. Employees' unions usually have as their main aims the stabilisation of, and if possible, an increase in, their members pay and comfort, and the reduction of their hours. Although employers' unions may have as one of their minor aims the presentation of a combined front to labour, their main aims are usually to prevent price, profit and production fluctuations; and to present a combined front to the Government. Because a modern mixed economy is still a competitive economy, unions of employers are not usually as closely knit as unions of employees.

The number of employers' and employees' unions remained fairly stable during the depression, and both rose in number, at a decreasing rate, after 1935. The number of unionists fell during the depression and did not rise substantially till 1936. By 1939, membership of employees' unions was

two and a half times what it had been in 1929.

G130 and T102 set out the effect of lockouts (of which there were three between 1929 and 1940) and strikes. Although no clear picture emerges, it seems that during the depression, a large number of workers were involved in strike action, each striking employee being out of work for about 10 days; whereas from 1934 onwards there was a second wave of strikes, with the number of employees effected reaching the highest number for the decade in 1939 - but strikes were of a shorter duration. The big rise in the number of strikers in the relatively more prosperous second half of the decade may have been due to two causes - the larger membership of unions, and the better economic conditions whereby more people could afford to strike. The reduced length of strikes may have been due to the reintroduction of compulsory arbitration, and the other provisions of the Industrial Conciliation and Arbitration Amendment Act.

(2) The Industrial Conciliation and Arbitration Amendment Act.

The Labour Government did not introduce industrial conciliation and arbitration to New Zealand. The first Act was passed in 1894, its purpose being, to quote the compiler of the 1942 Year Book, (P698) ".... to encourage the formation of industrial unions and associations, and to facilitate the settlement of industrial disputes by conciliation and arbitration." In 1898 the Court of Arbitration was empowered to prescribe minimum rates of pay, while in 1903 provision was made to protect a union member from victimisation. In 1905 strikes or lockouts were declared illegal, and before a dispute could be referred to the Court of Arbitration it had to go before a Conciliation Council, consisting of four conciliation commissioners. Only if they did not succeed in getting agreement would the dispute be referred to the Court of Arbitration. There were minor amendments to the law in 1911, 1918, 1925, and 1931, before compulsory arbitration was

abolished in 1932. It was still illegal to strike or lockout, however, and the conciliation commissions remained available to disputing parties.

By the 1936 Act, full jurisdiction was restored to the Court of Arbitration. In addition - "the Court is required to fix basic wages for adult male workers based on the needs of a man, wife and three children, and also a basic wage for adult female workers. It must also make general orders, prescribing the basic wages, which will apply to all awards etc. in force." (1)

S3 (4) and (5) of the Act laid down the following rules for the determining of the basic wage.

"In fixing a basic rate of wages ... the Court shall have regard to the general economic and financial conditions then affecting trade and industry in New Zealand, the cost of living and any fluctuations in the cost of living since the last order ... The basic rate of wages for adult male workers ... shall be such a rate as would, in the opinion of the Court, be sufficient to enable a man in receipt thereof to maintain a wife and three children in a fair and reasonable state of comfort."

S4 and 5 laid down that no new unions could be formed without the consent of the Minister of Labour; while S7 made provision for New Zealand wide unions where a majority of the district unions agreed to amalgamate. S18 stipulated that all workers who were subject to any award already in existence, or registered under the Act, had to become members of a union. Awards were to be reviewed, and, where practicable, hours of labour were to be reduced to 40 per week as from September 1st, with no reduction in weekly wage rates. (SS20,21.)

Sections 15 and 16 restated the way in which disputes between workers and employers, covered by an award or agreement registered under the Act, were to be settled. The employees' union, and in most cases, the employers' union, could appeal to the commissioner and assessors of the Council

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(1) 1942 Year Book, page 699.

of Conciliation, and compel the other party to appear. The assessors represented both sides. If an agreement was reached before the council, it was to be set forth as an industrial agreement, and unless the Court of Arbitration granted exemption, it was to be binding on all members of the employees' and employers' unions concerned. If such a settlement was not reached, the matter was to be referred to the Court of Arbitration, where both parties, and the Conciliation Council if it wished, could make representations. The award of the Court was to be binding on all present and future members of both the employees' and the employers' unions. Strikes or lockouts thereafter were illegal.

(3) Rates of pay and hours of work.

By a further amendment in 1936 to the Industrial Conciliation and Arbitration Act, the Court of Arbitration was instructed to make a general wage order within six months, to apply to all workers subject to an industrial award or agreement. The basic wage, set on November 2nd, 1936, was £3:16:- per week for males, and £1:16:- for females. In September, the following rates for casual workers were set:-

Skilled workers	2/9 per hour.
Semi-skilled workers	2/5 per hour to 2/7½ per hour.
Unskilled workers	2/4 per hour.

The pegging of successive wage orders to the cost of living index maintains for labour a stable share of money national income, but in a time of rising prices tends to be inflationary. The alternative is to tie the level of wages to the level of real national income. Then, only when the output of a country has risen can the level of wages rise. Although this system is not inflationary, some degree of prescription, if not actual control of prices, is necessary to stop fluctuations in labour's share of money national income.

Supplementary to the Industrial Conciliation and Arbitration Act was the Factories Amendment Act, dated 8th June, 1936. Section 3 of this Act limited the normal working week



in factories to five eight hour days, although section 4 allowed for a six day week in dairy factories. Section 5 stipulated that there was to be no Sunday work for women and boys, while by sections 6 and 15 overtime was to be paid at the rate of time and a half, with double time rates on Sundays. Wages could not be reduced, nor persons dismissed, merely by reason of the shortened working week. (S8) Section 12 set a sliding scale of minimum wages, dependent upon length of service. After 3 years service, the minimum wage was to be not less than £2 per week. Sections 13 and 14 laid down 8 paid statutory holidays.

The Shops and Offices Amendment Act, presented to Parliament at the same time as the Industrial Conciliation and Arbitration Amendment Act, made similar provisions for shop and office workers, except that the normal working week was one of 44 hours.

#### (4) Industrial Accidents.

The fact that the number of industrial accidents per 100,000 man hours worked rose during the later part of the decade (See G131 and T103) may have been due to one or more or three causes: firstly, if the best workers are employed first, then as employment increases, less able workers, who are usually more accident prone than more able workers, would be employed; secondly, people who would not have claimed to be "injured" following a minor mishap during the depression may have been able to afford to do so during the later '30s; and thirdly, the degree of mechanisation per worker may have increased as economic activity revived; most industrial accidents are due to machine-mishaps.

#### S4. Industrial Production.

##### (1) The value of production.

T104 and G139 and 140 set out the value of industrial production, and are largely self explanatory. Several points of importance to this study should be noted, however. Firstly,

the value of inputs of materials exceeded the value added by industry. This is due to New Zealand's industries tending to be processing industries rather than manufacturing industries. This fact is illustrated by the great relative importance of the food industries, and the high level of inputs in these industries, as compared with the non-food industries. Secondly, salaries and wages rose more over the decade than did expenses and profits. It is impossible to deduce from this that that industry became less profitable, however - it may be that industry became more efficient, and so expenses rather than profits fell. Unfortunately, no industrial profit figures are available, the series for expenses and profits being deduced by deducting the value of materials and salaries and wages from the total value of industrial output. Thirdly, although salaries and wages rose from 1934 onwards, there is no change of trend that can be attributed either to the 1936 Industrial Conciliation and Arbitration Amendment Act, or to the 1936 Factories Amendment Act. Hence, if these Acts did have any effect, it was to continue a previous trend, rather than to change it. Fourthly, the total value of production of the producer and consumer durables industries was much less than that of the consumer industries, though the added value of both classes of industry was in about the same proportion as their employment numbers. Fifthly, as with the employment figures, so with the value of production, the trough came in 1932 for consumer industries, and 1933 for producer and consumer durables industries. The value of output of the producer and consumer durables industries fell more during the depression than did the value of consumer industries, and so the rate of recovery of the former was greater than that of the latter. In the consumer industries, however, the depression resulted mainly in a fall in the value of material inputs, whereas the salaries and wages input took the major part of the fall in the value of producer and consumer durables industry output. And lastly, of the consumer

industries, clothing and services tended to be more stable than food industries; and also more stable than either of the producer and consumer durables industry groups. Of the producer and consumer durables industries, the engineering group showed a greater secular rise in value of output than did the building group.

(2) The volume of production.

Although the value of industrial production contributes to the level of money national income, and so possibly to the level of aggregate demand for goods, including industrial goods, it is the volume of industrial production that contributes towards the level of real national income, which determines the level of employment.

T105 and G142 set out the volume of production of the 22 major New Zealand industries. Immediately obvious is the fact that whereas the volume of production of many consumer industries rose throughout the depression, the volume of production of producer and consumer durables industries did not really begin to rise again till 1934. The rate of recovery during the reflation of producer and consumer durables industries was such that, despite this fall in production during the recession, producer and consumer durables industries in general achieved approximately the same secular rate of growth during the '30s as did the consumer industries. Only in the case of brick, tile and pottery manufacture was the index of production of each of the major industries below the 1928-9 level in 1939-40. Although some industries show a fall in production late in the '30s, others do not, and it is impossible to make a general statement. Similarly, it is impossible to find any signs of a general increase in output following the advent of the first Labour Government.

The industries showing the greatest overall rise in productivity were electrical engineering (674% increase, too steep to be graphed), hosiery (292%), electricity (174%), concrete pipes etc. (121%), boots and shoes (102%), tin plate and sheet metal (101%), woodware and turnery (80%), coach-

building etc. (71%), and clothing (70%). Eight of these nine industries were among the nine industries showing the greatest increase in employment, the exception in this case being concrete pipes etc., and in that case being dairy and agricultural machinery etc.

### (3) Productivity.

By combining the index numbers for employment and volume of production of the 22 major industries in New Zealand, an index of productivity has been arrived at. This is shown on T106, and graphed in G143. A fall in productivity indicates a greater fall in production than in employment, or a greater rise in employment than in production; while a rise in productivity indicates a greater fall in employment than in production, or a greater rise in production than in employment. No clear picture emerges from the figures except that, apart from clothing, sawmilling etc., bricks etc., and agricultural and dairy machinery etc., production in 1939-40 was more efficient in terms of manpower than in 1928-29. The clothing industry exception is an important one, in that it was both a major industry, and a growing one. Most industries show a change in trend in 1932 or 1933, but the changes are not consistent. Fifteen industries, mostly producer and consumer durables industries, which had suffered a fall in productivity during the depression, reversed their downward trend, while three industries, all consumer industries, which had increased productivity during the depression, reversed the trend, or continued to increase productivity, but at a decreased rate. The other ~~for~~<sup>for</sup> industries show no clearly defined change. There is no indication of a favourable effect upon the productivity of industry of the advent of the Labour Government, some industries showing an increased and some industries a decreased rate of productivity for the year ended 31/3/37. Most industries show a fall, or a reduced rate of increase, of productivity sometime during the late '30s, and although in most cases this occurs in the year ended 31/3/38, in some cases it occurs in another year, and in other cases this change

is part of change that started to occur some time earlier.

CHAPTER XI. SECTORS IN WHICH STATE INTERVENTION TOOK THE  
FORM OF STIMULATION - CONTINUED.

BUILDING.

S1. Labour Government Policy.

Building activity is a recognised indicator of economic activity. This is because the construction of buildings, new wharves, etc., can be easily postponed in times of depression, and hence the construction of these assets tends to be concentrated into periods of boom. Apart from its importance as an indicator of economic activity, a study of the building industry is of importance for three reasons; firstly, the industry itself provides employment; secondly, it can stimulate production and employment in the industries that provide it with raw materials; and thirdly, as an investment industry, it gives an indication of the level of investment. Buildings are, however, an "unproductive" form of investment - a new building in place of an old one is not likely to increase production once it is up. Hence, high investment in building may mean the end of continued economic expansion.

Labour Government building policy centred mainly round the building of houses, and was of a conflicting kind. Firstly, the State Advances Corporation was authorised to acquire land and have houses constructed upon it for rent or sale. (See Chapter VI). At the same time, the Fair Rents Act of 1936 was passed, to hold rents on places of dwelling at their 1st May 1936 level, and making provision for the determining of a fair rent where there was dispute. This Act was introduced due to an actual or suspected shortage of housing. To the extent that this Act did reduce rents, or stop them from rising, however, it would have reduced the profitability of letting dwellings. If the profitability of letting dwellings was reduced, the building industry would be effected in two ways. Firstly, the demand for buildings suitable for letting would be

reduced, and secondly the demand for private dwellings may also have been reduced, it being cheaper to rent than to own a home. The cost of owning one's own home is not just the mortgage repayment and maintenance and depreciation cost; there is also the risk that due to rezoning etc. one's house may lose its resale value. Hence it would not be necessary for the rent on leased dwellings to fall as low as the current level of weekly mortgage repayments before some people would become unwilling to give up their rented home for one of their own.

## S2. Building Materials Industry.

The output of timber and stone have already been noted - see T96 & G121, and T89 & G110. To recapitulate, the output of timber increased rapidly between 1932 and 1936, due largely to increased output of State timber. After 1936 timber output increased only slightly, due to a contraction in the State's output of timber. Building and monumental stone output increased greatly in 1934, and in 1937, falling in other years, though remaining higher in 1940 than it had been in 1930. At all times, however, the output of building and monumental stone was of minor importance. Stone for harbour works etc., although of greater importance quantitatively than building and monumental stone, declined in output throughout the decade. The production of cement has been dealt with under both mining and secondary industry. Both series showed that the output of cement did not rise materially till 1936, after which it rose rapidly, to nearly double its 1936 level by 1940.

T107 and Gs 147, 148 & 149 show the level of production of bricks, corrugated iron, and channel and girder iron. Bricks have already been dealt with under secondary industry. G147 reinforces what was seen there - the output of bricks fell greatly till 1932, and did not during the decade regain its previous level. The output of corrugated iron, as shown by G148, rose rapidly from 1933 till 1936, and then fell steeply. At the same time the output of channel and girder iron (G149) rose steeply from 1936 till 1938, after which it fell.

Like cement, channel and girder iron are used in the construction of large commercial buildings, whereas bricks, timber and corrugated iron are used in the construction of small buildings, typically houses. Hence there appears to have been an increase in dwelling building materials between 1934 and 1936, and an increase in commercial building materials from about 1936 till 1939.

### S3. The Building and Construction Industry.

#### (1) The organisation of and investment in building.

G144 and T108 show the number of establishments engaged in building. Nearly 500 new building establishments sprang up in 1934/5. After this the number of new building establishments increased at a diminished and diminishing rate.

G145 and T109 show that total paid up capital engaged in building construction did not rise greatly after 1932 until 1939 and 1940. There was a relative growth in loan capital at the expense of share capital in the second half of the decade that is parallel to the similar relative growth of loan capital that was noted in secondary industry establishments.

T108 shows the approximate value of fixed assets engaged in the building industry. The value of both land and buildings, and plant and machinery fell till 1936, and had risen only slightly by 1940. The low capital and asset value of building establishments, coupled with the increasing number of these establishments, suggests that the industry may have been over-capitalised in the late '20s, and that by the end of the '30s the industry may have been on a sounder capital footing.

#### (2) Employment in Building.

Employment figures are given in T108 and G146. By 1940 employment was nearly half as large again as it was in 1930, having risen steeply, in two slight waves, from 1934 onwards. A comparison between T108 and T112 (see later) reveals that employment became more productive as the second half of the

decade progressed in that the level of employment rose less than did both the number and the value of buildings completed.

### (3) Building production.

T110 and G150 show a breakdown of building inputs. As with secondary industry, salaries and wages were only a minor part of the total cost of building production; the major part being the cost of materials. G150 shows a continued increase of building materials costs, while the volume of building materials graphs that were studied in S2 of this chapter show a tendency to fall late in the decade. This would suggest that there may have been a rise in building materials prices in the second half of the decade.

Both G150 and G151 (T111) show that the value of work performed rose from just over £2m in 1933 to over £16m in 1940, with the construction of buildings forming the major part. Between 1936 and 1940 over £40m was invested in new buildings. This must have accounted for a considerable portion of the rather limited investment of the period.

Figures presented in G152 and T112 show that, despite the increased output of private dwelling materials between 1934 and 1936, and the increased output of commercial building materials after this, there was an increasing number of dwellings erected each year from 1933 right till the end of the decade, while the number of new business premises erected each year reached a peak in 1938, and then fell away. This would suggest that there must have been some fluctuation in the volume and value of building materials stocks on hand from year to year. The fall in the number of business premises erected late in the decade may have been due to the fall in export prices - business men would tend to react more quickly than would private individuals. The average value of each house erected fell during the depression, and then rose to nearly double the 1933 figure in 1940. This rise in value may indicate that a better quality of house was being erected or it may be due to a rise in the costs of building.



The value of business premises erected was small compared with the value of houses erected. Like the average cost of new dwellings, the average cost of business premises rose steeply in the second half of the decade. In this case, however, it is not so easy to conclude the rise in average cost was due to a rise in prices, because the size of a commercial building is not limited in the same way as is the size of a private dwelling.

There has been nothing on the preceeding study to suggest that the policy of the Labour Government reduced building activity in the late '30s. At the same time, there is nothing to suggest that the strong upwards trend in building activity, which started in 1935, was a product of this Labour Government policy.

CONCLUSION.

In this thesis a theory of employment has been expounded. It is that the level of real national income determines the level of employment; that the level of real national income indetermined by the level of aggregate demand; and that the level of aggregate demand is largely determined by the level of money national income. Aggregate demand was then further defined, as being composed of consumption demand, investment demand, Government demand and foreign demand. The State has complete control over the level of Government demand, but only prescriptive or stimulative control over the level of consumption and investment demand. It has no control over foreign demand, which is determined, not by the level of money national income in New Zealand, but by the level of money national income in the importing country. In this study of the New Zealand economy in the 1930s, an attempt has been made to ascertain to what extent the Labour Government succeeded in controlling, prescribing and stimulating aggregate demand in order to bring about a recovery in real national income and employment; and to what extent the Government's policy was aided or thwarted by that part of aggregate demand completely beyond its control - foreign demand. The conclusion has been that the real determiner of the level of economic activity in New Zealand during the late '30s was not the Labour Government, but the Government and peoples of the countries, principally those of the United Kingdom, who imported New Zealand produce. The foreign sector of the economy predominated, firstly through the direct demand that it exercised, and secondly through the effect that fluctuations in export prices had on business expectations in New Zealand.

It is not claimed that the theory that the foreign sector of the New Zealand economy dominated the rest of the economy during the 1930s has been proved - there is not sufficient useful statistical information available to be able to prove

anything about the 1930s. At most, all that has been done is to establish an alternative hypothesis to the currently held one; that the first Labour Government, by following in practice an economic policy similar to that suggested as a theory by Lord Keynes, succeeded in turning an economic depression into an economic boom.

GRAPHS.

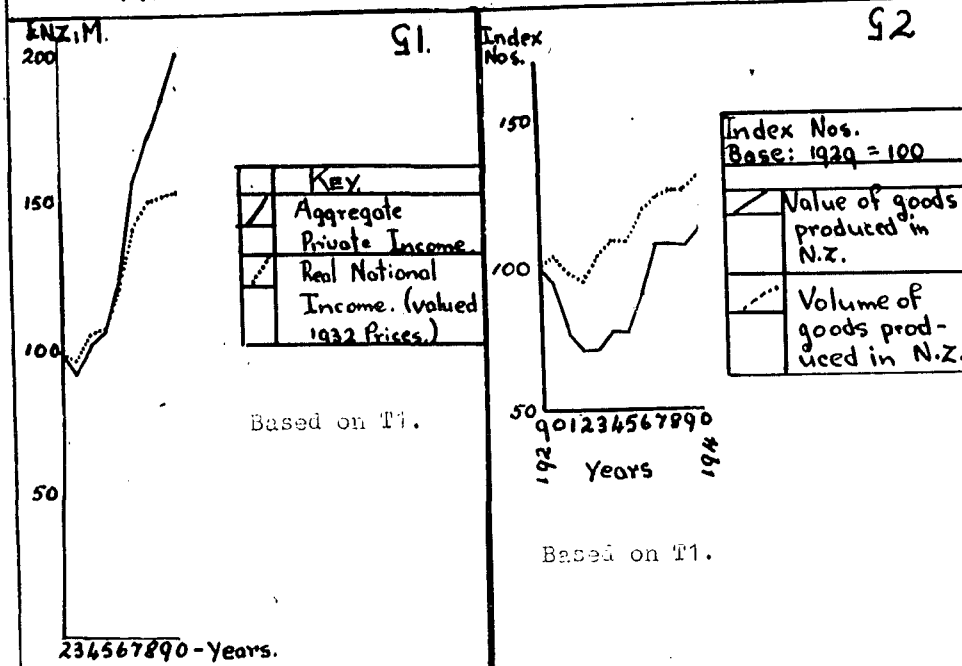
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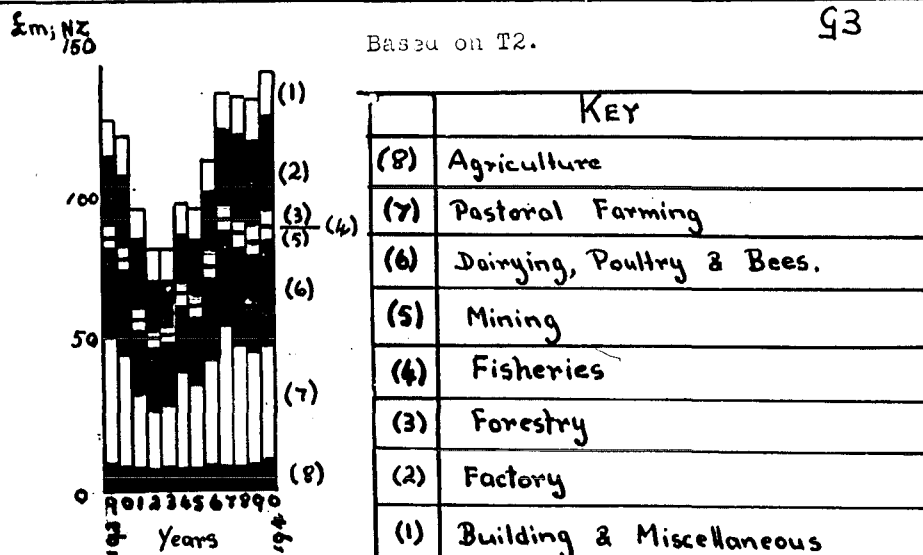
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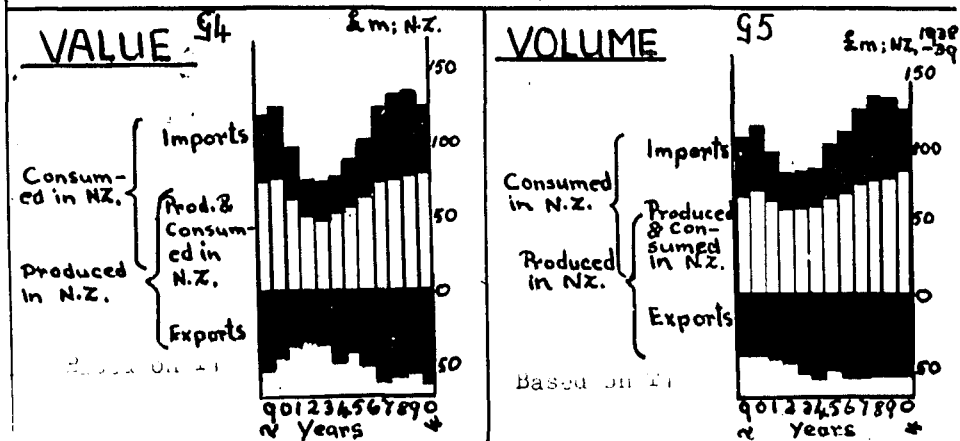
# NATIONAL INCOME



## VALUE OF PRODUCTION BY SECTORS



## GOODS AVAILABLE FOR CONSUMPTION

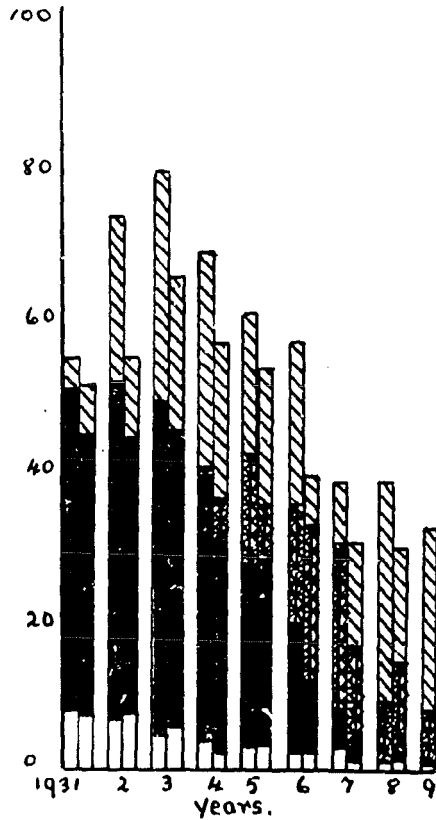




# MALE UNEMPLOYMENT

Nos. Unemployed. (1000)

96.



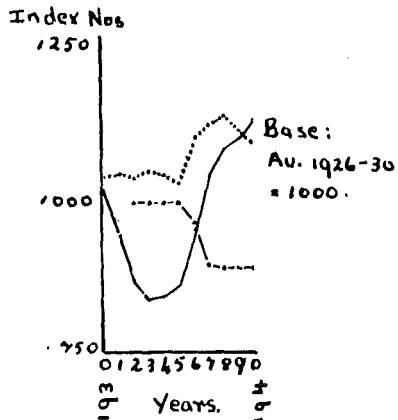
Based on 1931.

KEY.	
	No on Unemployment Register, totally unemployed.
	Working part-time on Scheme No 5.
	Working full time, with assistance from the Employment Promotion Fund.
	Sustenance without work.
Highest & lowest figures for each year given.	

## WAGE RATES & HOURS OF LABOUR.

### MALES

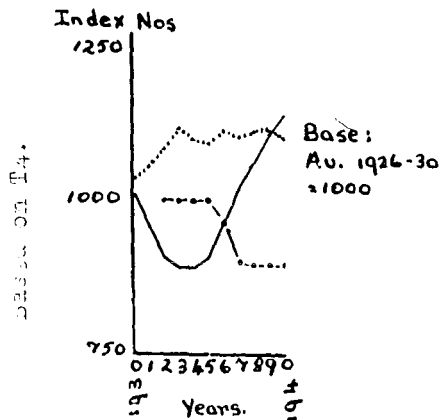
97



KEY.	
	Nominal weekly wage rates.
	Effective weekly wage rates.
	Hours of labour per full working week.

### FEMALES

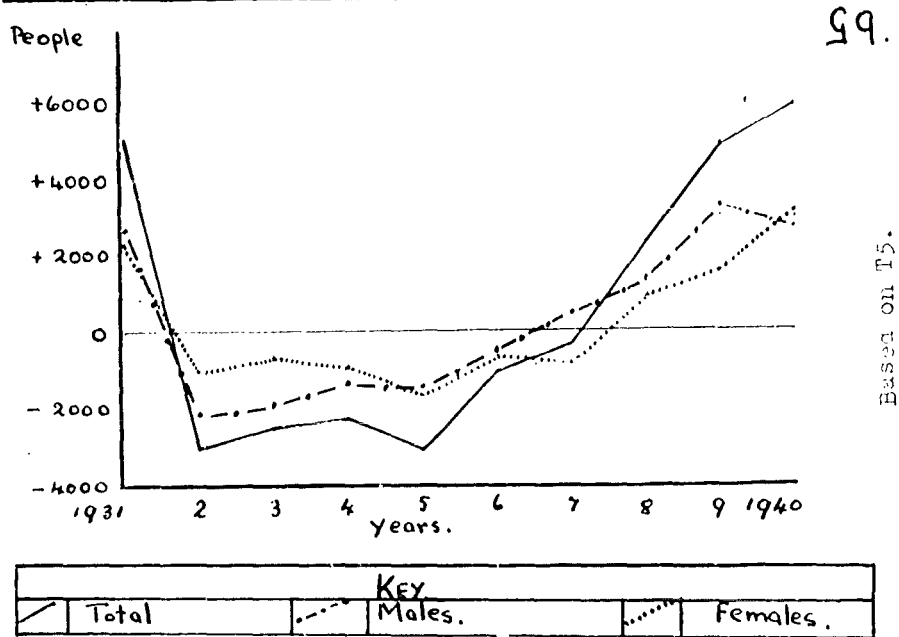
98



KEY.	
	Nominal weekly wage rates.
	Effective weekly wage rates.
	Hours of labour per full working week.

# MOBILITY OF LABOUR

## EXCESS OF IMMIGRANTS OVER EMMIGRANTS



### §10

#### POP<sup>N</sup> MOVEMENT, S.I. TO N.I.

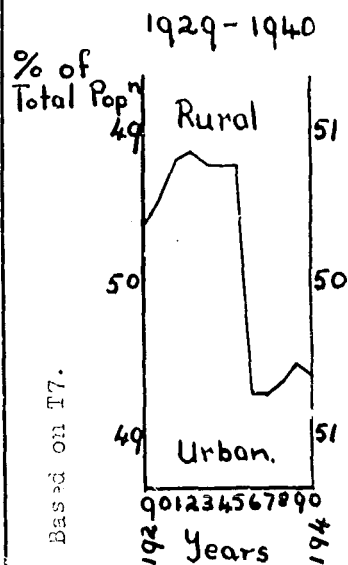
1930 - 1940  
N.I. Arrivals As A % Of  
S.I. Arrivals.



—	Shipping Figures
- - -	Air Figures.

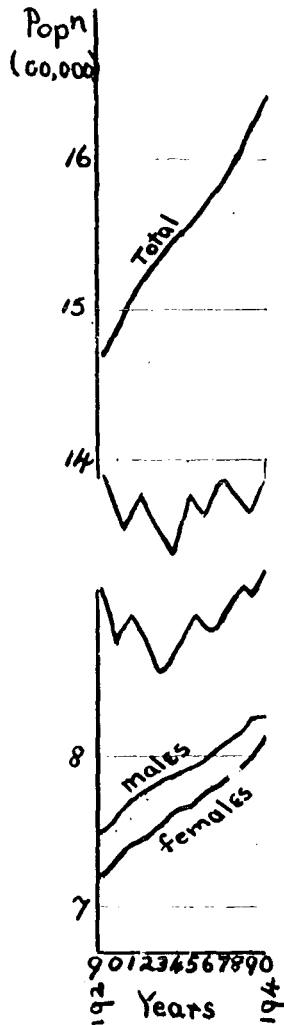
### §11

#### POP<sup>N</sup> MOVEMENT, RURAL TO URBAN



§12

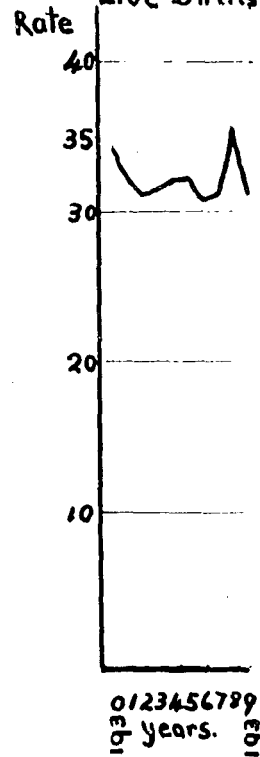
POP<sup>N</sup> OF N.Z.  
(including Maoris)  
1929-1940



Based on T7.

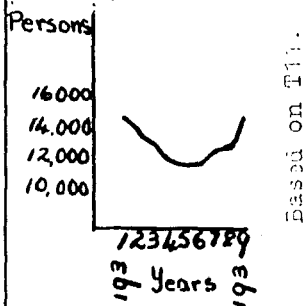
§13

INFANT MORTALITY IN NZ  
1930-1940  
Rate Per 1000 Live Births.



§14

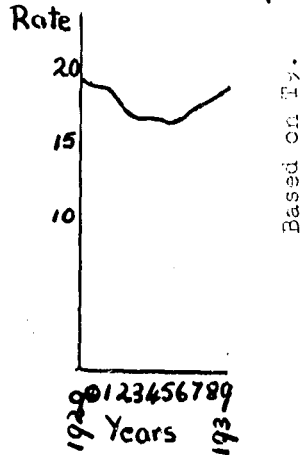
EXCESS OF BIRTHS  
OVER DEATHS IN NZ  
1931-39.



Based on T11.

§15

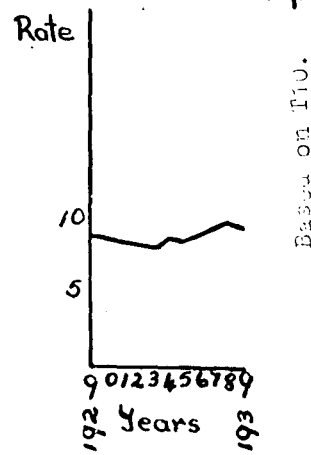
BIRTHS IN NZ  
1929-1939  
Rate Per 1000 Popn



Based on T7.

§16

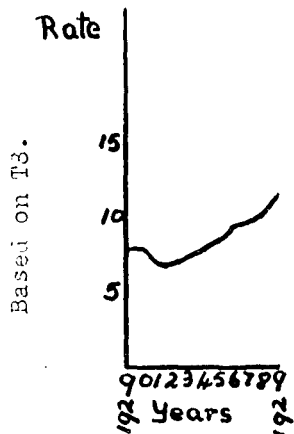
DEATHS IN NZ  
1929-1939  
Rate Per 1000 Popn



Based on T10.

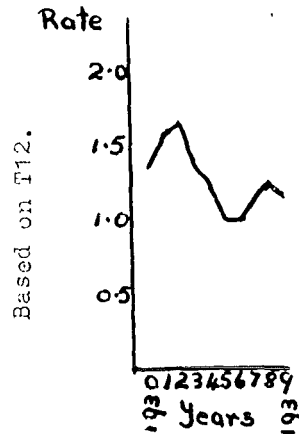
## §17 MARRIAGES IN NZ

1929-1939  
Rate Per 1000 Popn



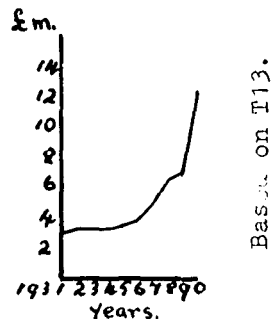
## §18 SUICIDES IN NZ

1930-1939  
Rate Per 1000 Popn

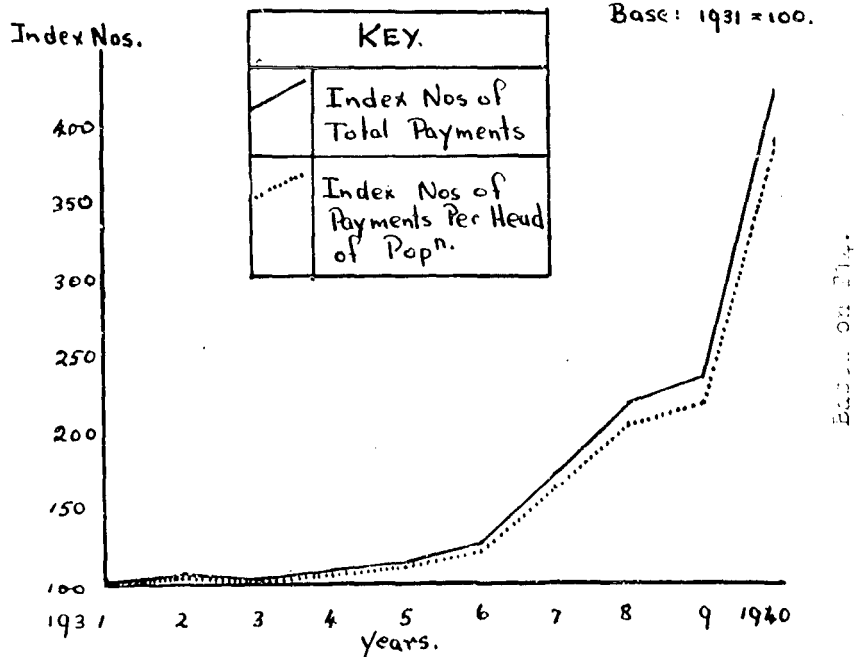


## PENSION & SOCIAL SECURITY PAYMENTS

### TOTAL PAYMENTS MADE

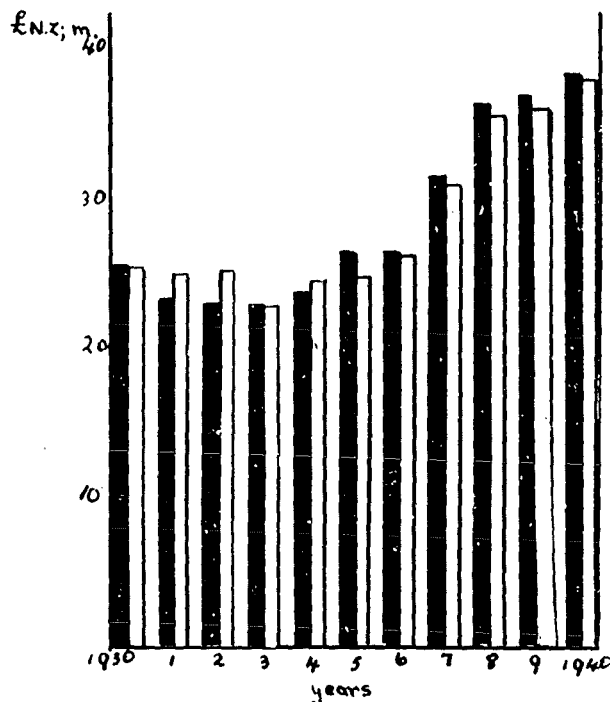


### TOTAL PAYMENTS & PAYMENT PER HEAD POPN.



# CONSOLIDATED FUND.

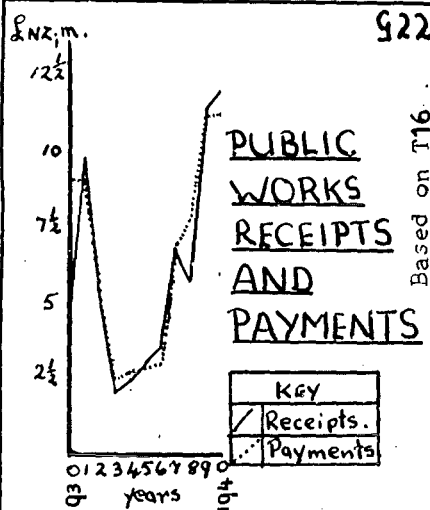
921



KEY	
■	Receipts
□	Payments.

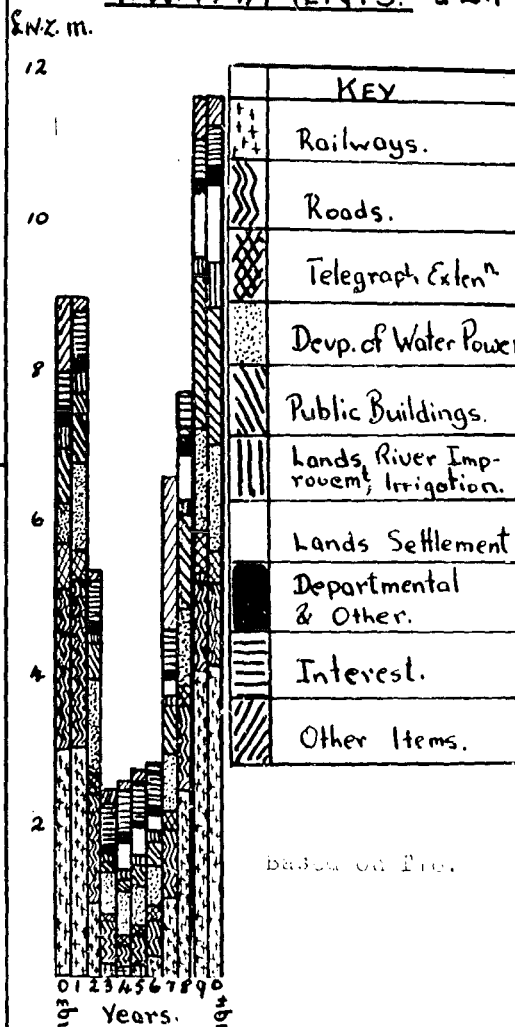
Based on T15.

## PUBLIC WORKS ACCOUNT



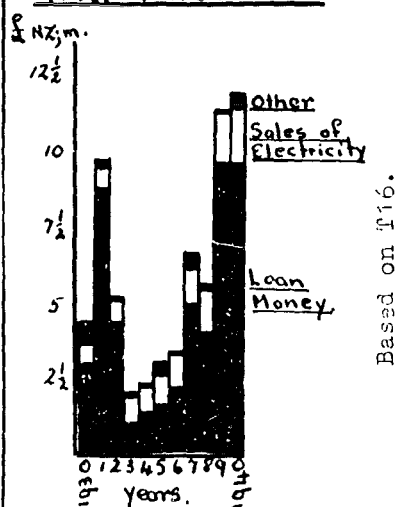
KEY	
—	Receipts.
—	Payments

## P.W. PAYMENTS. 924



Based on T16.

## P.W. RECEIPTS. 923



# TOTAL TAX.

925

£Nz. m.

50

40

30

20

10

0 1 2 3 4 5 6 7 8 9 0

1933 years. 1944

KEY	
	Customs Duty
	Motor Vehicles Tax
	Income Tax
	Death Duties
	* Unemployment Tax
	Sales Tax
	Land Tax
	Other Tax

\* Later Social Security Tax.

Based on 133.

## SOME ITEMS OF STATE EXPENDITURE

926

£Nz. m.

7

6

5

4

3

2

1

0 1 2 3 4 5 6 7 8 9 0

1933 years. 1944

② 12,288,340

①

④

③

## TOTAL TAX PER HEAD POPULATION

927

£Nz.

30

20

10

0 1 2 3 4 5 6 7 8 9 0

1933 years. 1944

Based on 133.

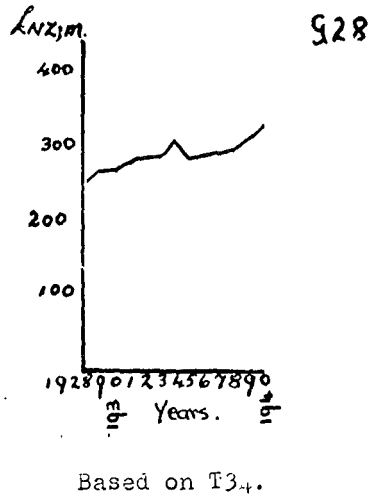
KEY	
①	Education
②	Social Security (Pensions)*
③	Hospitals etc.
④	Defence

\* & unemployment

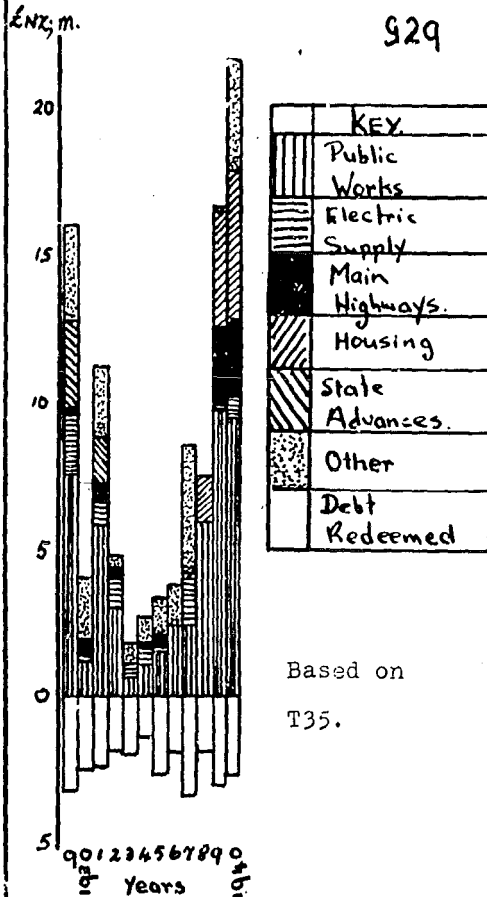
Based on 132.

# NATIONAL DEBT

## GROSS INDEBTEDNESS

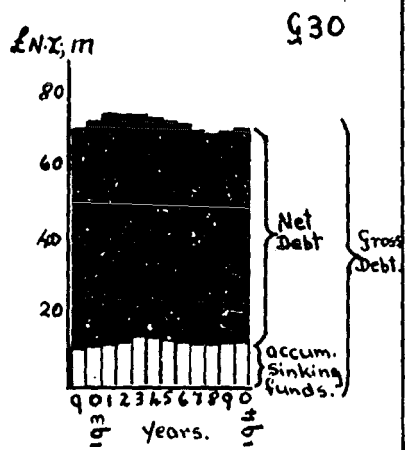


## NEW DEBT

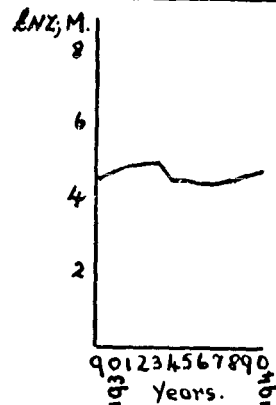


# LOCAL GOVERNMENT DEBT

## TOTAL DEBT



## ANNUAL LOAN CHARGE



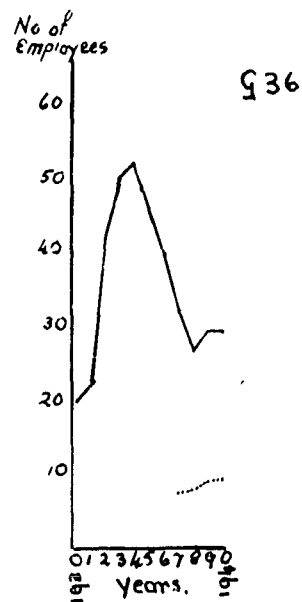




## LOCAL AUTHORITY EMPLOYMENT

KEY	
	Local Authorities excluding:- (a) Hospital Boards (b) Fire Boards (c) Electric Power Boards.
	Hospital Boards.

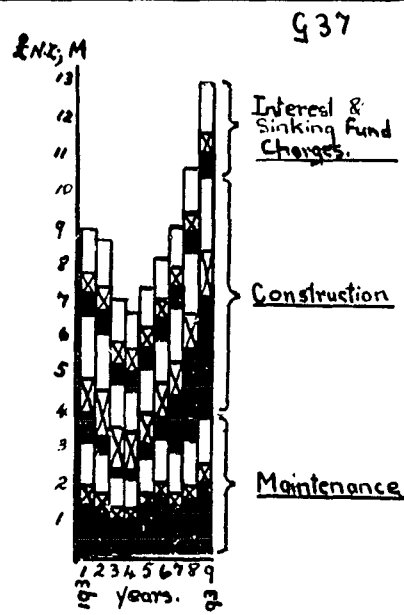
Based on T36.



## ROADING EXPENDITURE

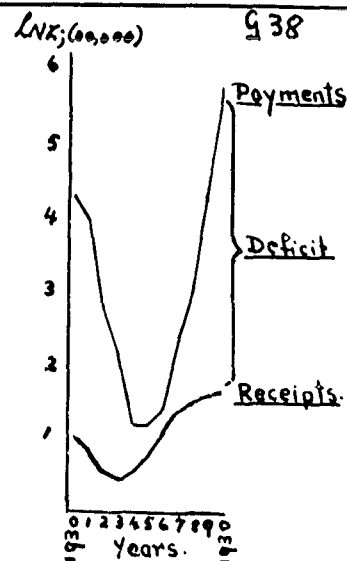
Based on T19.

KEY	
	Main Highways
	Urban Roads & Streets.
	Other " " "



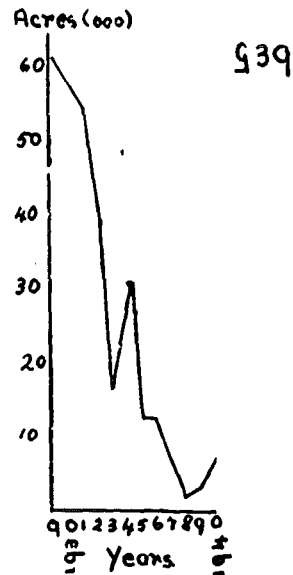
## STATE FORESTS RECEIPTS & PAYMENTS

Based on T20.



# AREA PLANT- ED IN STATE FOREST

Based on T21.

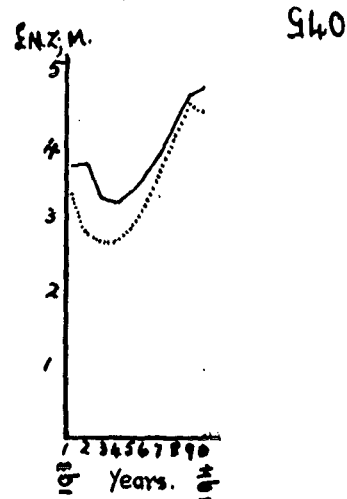


## P. & T. DEPARTMENT.

### RECEIPTS & PAYMENTS

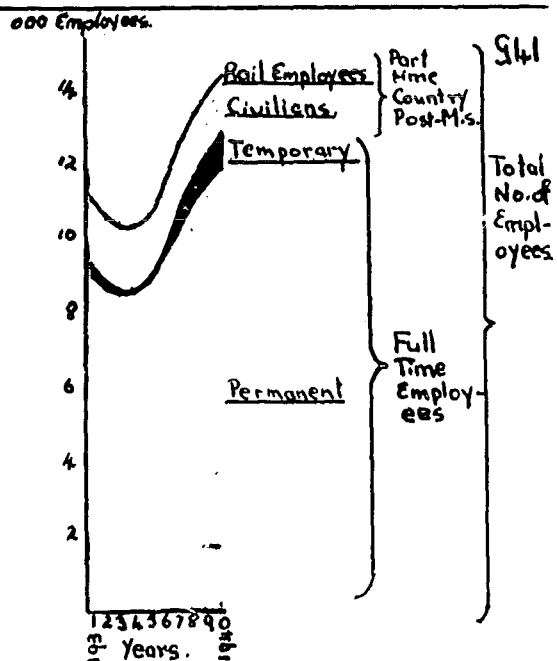
KEY	
/	Receipts
—	Payments

Based on T22.



### EMPLOYMENT.

Based on T23.

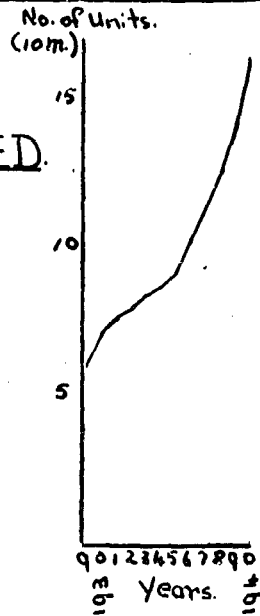


# ELECTRIC POWER.

942

## UNITS PRODUCED.

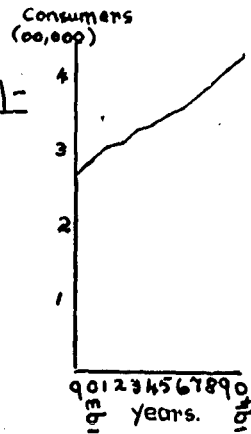
Based on  
T24.



943

## CONSUMERS.

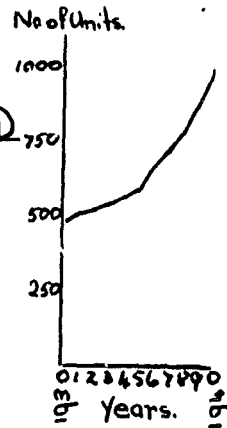
Based on T24.



944

## UNITS GENERATED PER HEAD MEAN POPN.

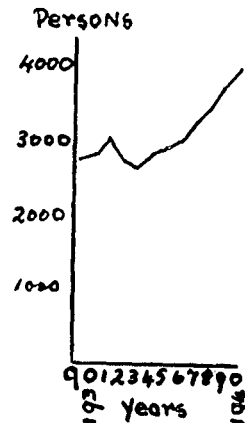
Based on T24.



945

## EMPLOYMENT.

Based on T24.

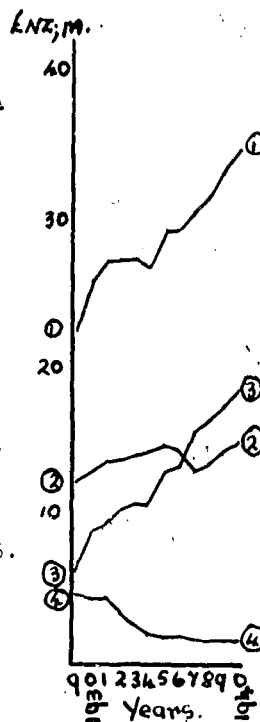


946

## CAPITAL OUTLAY

Based on T25.

KEY	
①	Total
②	Electric Power Boards
③	State
④	Private

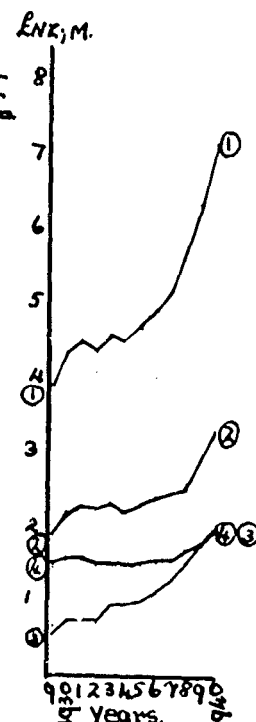


947.

## REVENUE

Based on T26.

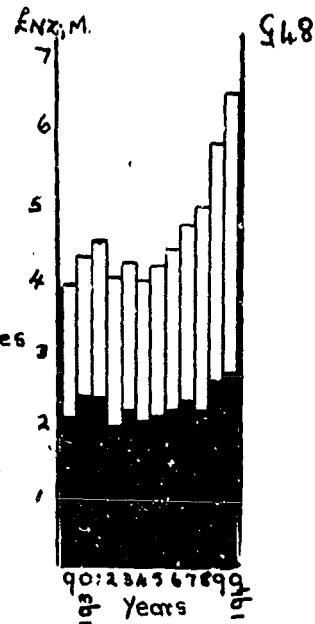
KEY	
①	Total
②	Electric Power Boards
③	State
④	Private



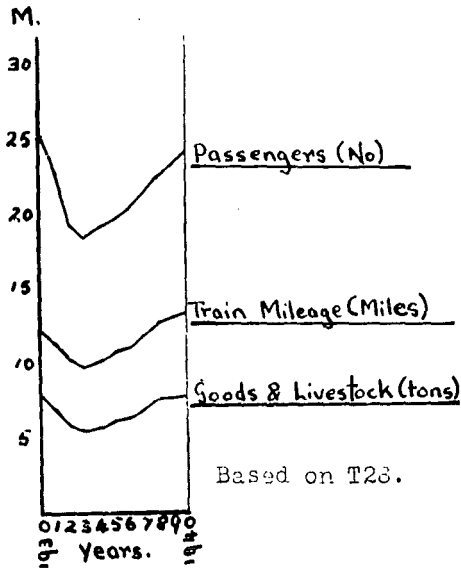
# ELECTRIC POWER; EXPENDITURE

Based on T27.

Working Expenses  
Capital Charges.



## MILEAGE & LOAD



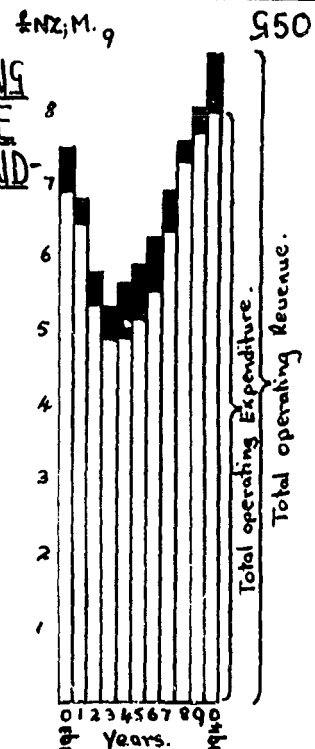
Based on T23.

## RAILWAYS.

\$49

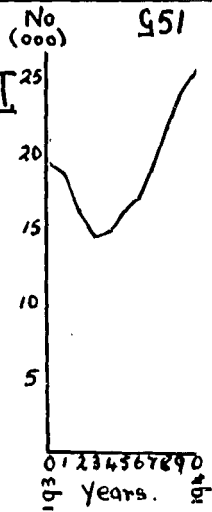
## OPERATING REVENUE & EXPEND- ITURE.

Based on  
T29.



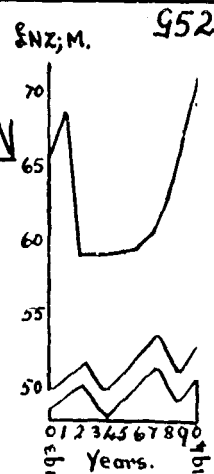
## TOTAL EMPLOYMENT

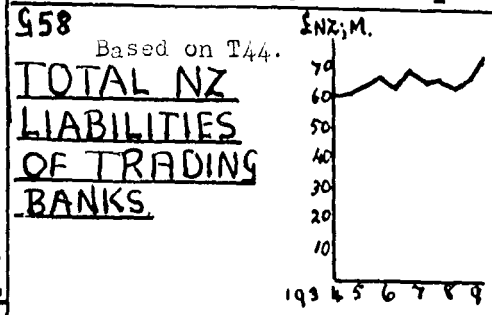
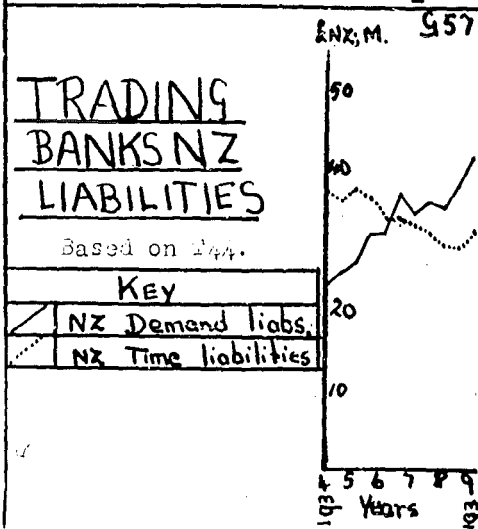
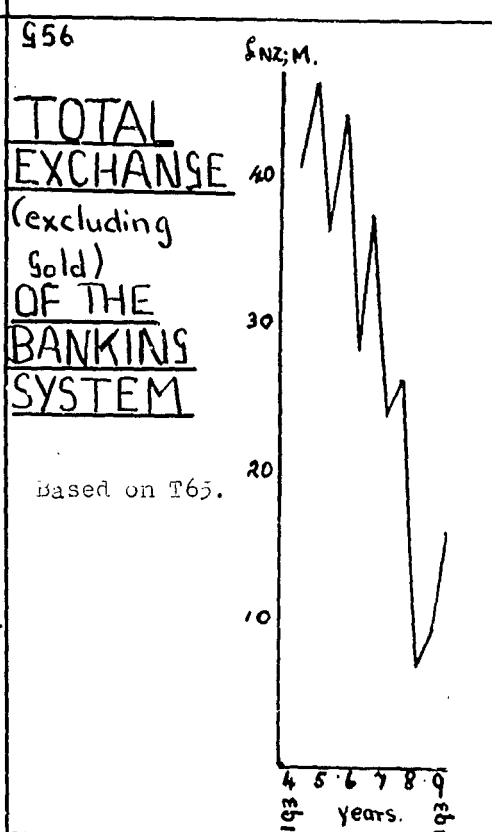
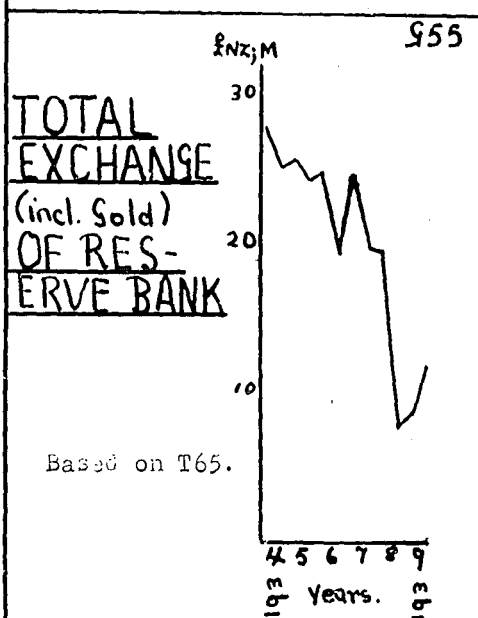
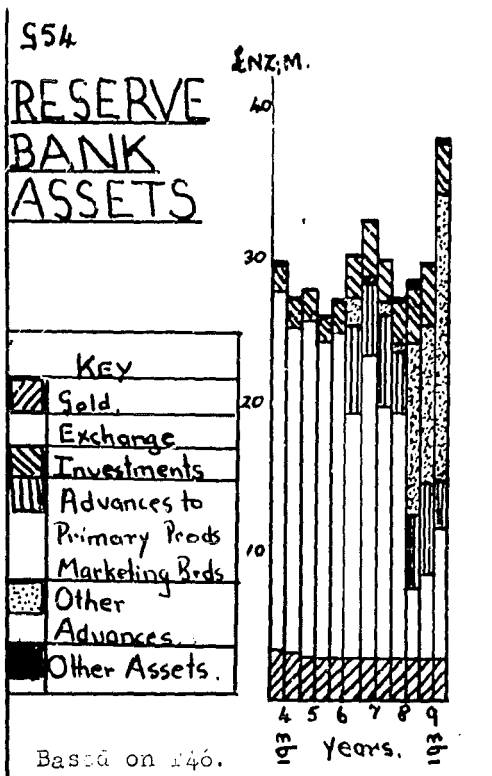
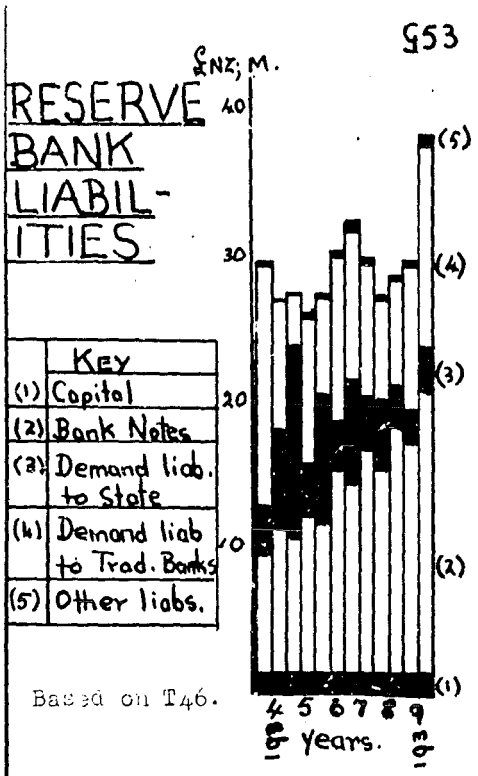
Based on T30.

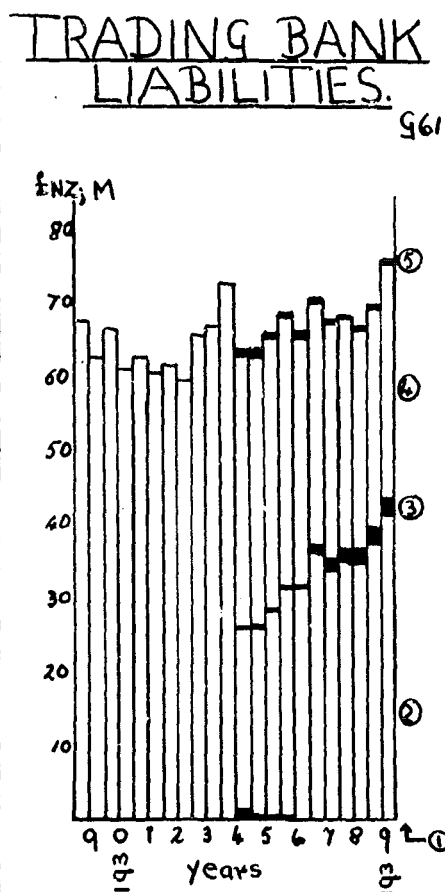
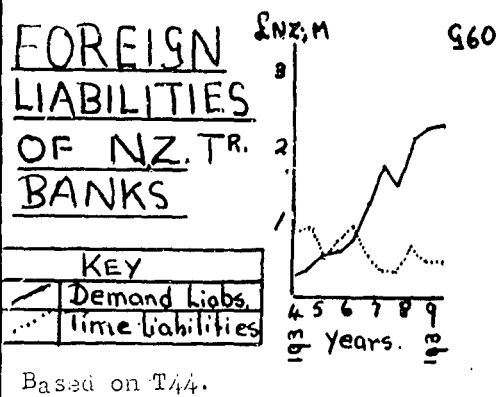
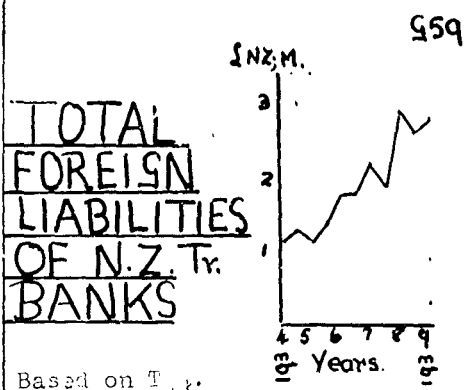


## CAPITAL VALUE OF CONSTRUCTION

Based on T31.

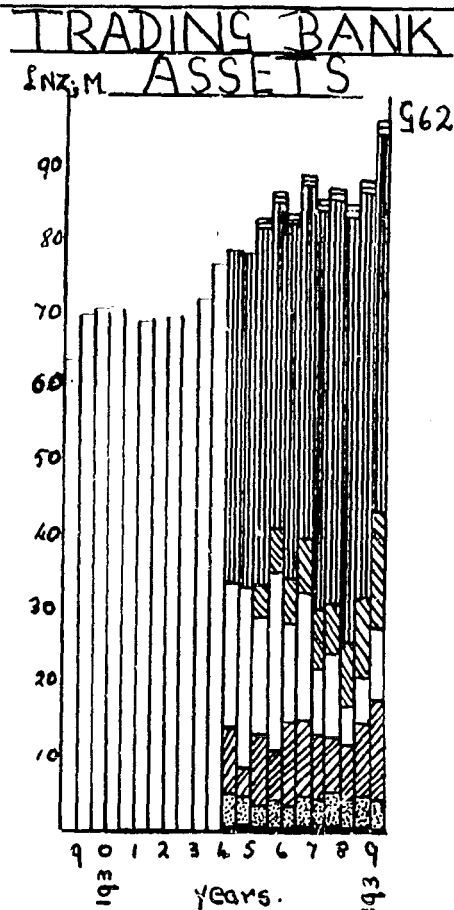






**KEY.**

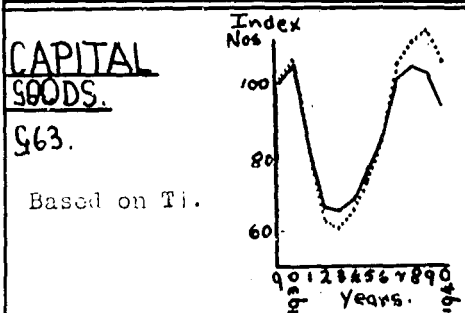
①	Notes in Circulation.
②	Demand Liabs. in N.Z.
③	Demand Liabs. outside N.Z.
④	Time Liabilities in N.Z.
⑤	Time Liabilities outside N.Z.



**KEY.**

■	Coin and Bullion
▨	Reserve Bank Notes
▩	Balances held at Reserve Bank
▧	Overseas Assets
▦	Securities Held.
▤	Advances and Discounts.
▥	Land & Buildings etc.

Based on T45.



**KEY.**

—	Goods Available for Use, Index Nos.
...	Goods Other than Capital Goods, Index Nos.

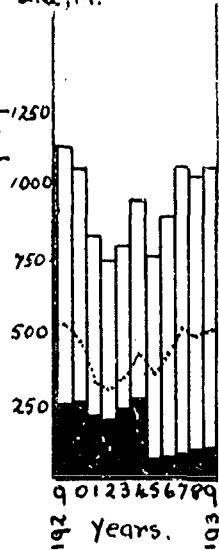
964

# VOLUME OF BANK- ING BUSI- NESS.

KEY	
■	Sout. Debits
□	Debits other than Sout.
...	Clearings.

Based on T40.

£NZ;M.



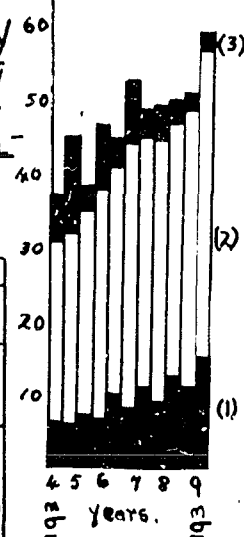
965

# QUANTITY OF MONEY IN CIRCUL- ATION

KEY	
(1)	Net Note Circulation
(2)	Trading Banks NZ Demand Liabilities
(3)	Reserve Banks Demand Liabs. (not to Trading Banks)

Based on T39.

£NZ;M.

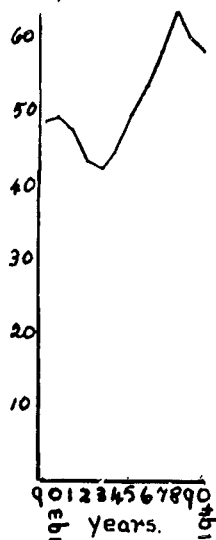


966

# TOTAL AMOUNT TO Cr. OF P.O.S.B. DEPOSIT- ORS' A/Cs.

Based on T47.

£NZ;M.

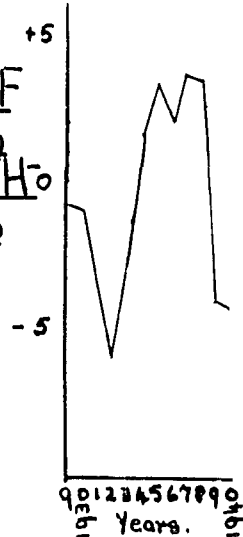


967

# P.O.S.B. EXCESS OF DEPOSITS OVER WITH- DRAWALS

Based on T47.

£NZ;M.



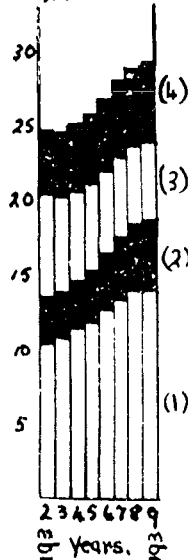
968

# TOTAL FUNDS DEPOSITED WITH TRUSTEE SAVINGS BANKS, BUILDING SOCS, TRADING COS., & FRIEND- LY SOCS.

Based on T40.

KEY	
(1)	Trustee Savings Banks.
(2)	Building Societies.
(3)	Trading Companies.
(4)	Friendly Societies.

£NZ;M.

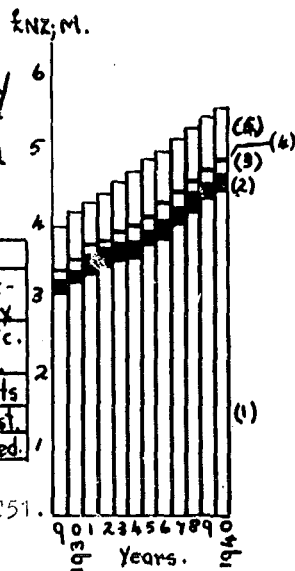


969

# FRIENDLY SOCIETIES ASSETS

KEY.	
(1)	Mort. on Freehold Property
(2)	Govt. & Munic. Debentures.
(3)	Bank Deposits
(4)	Other Invest.
(5)	Not Invested.

Based on T51.

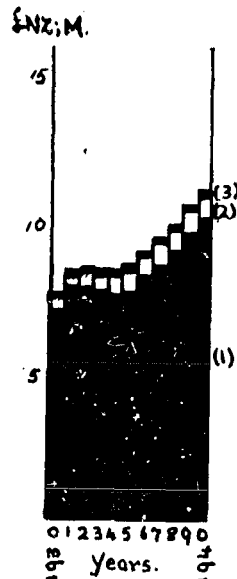


970

# BUILDING SOCIETIES ASSETS

KEY.	
(1)	Advances on Mortgage
(2)	Other Invest. & Assets.
(3)	Cash in Hand & @ Bank.

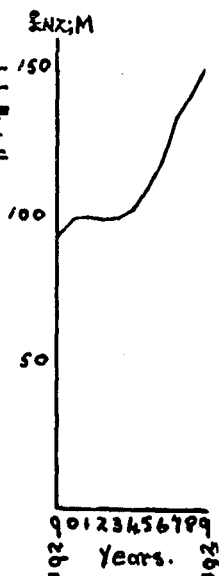
Based on T49.



971

# TOTAL LIFE ASSURANCE COVER.

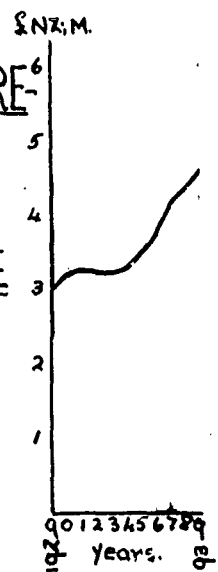
Based on T52.



972

# ANNUAL PREMIUMS PAYABLE ON TOTAL LIFE ASSURANCE COVER.

Based on T52.

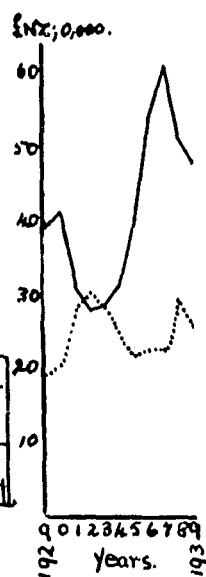


973

# ANN. PREMS. ON POLICIES ISSUED & DISCONTINUED EACH YEAR.

KEY.	
—	Ann. Prems on Policies Issued
...	Ann. Prems on Policies Discont.

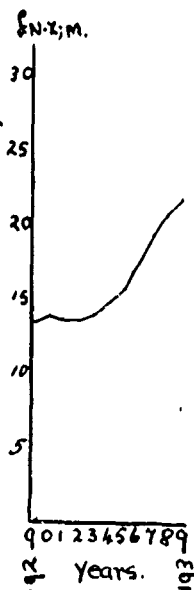
Based on T52.



974

# TOTAL INDUSTRIAL INSURANCE COVER.

Based on T53.

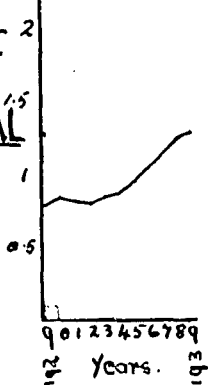




975

# ANNUAL PREMIUMS PAY- ABLE ON TOTAL INDUSTRIAL ASSURANCE COVER

£NZ;M.

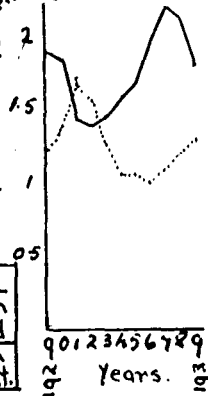


Based on T53.

976

# ANN. PREMS. ON POLICIES ISSUED & DISCONTIN- UED EACH YEAR

£NZ. (100,000)

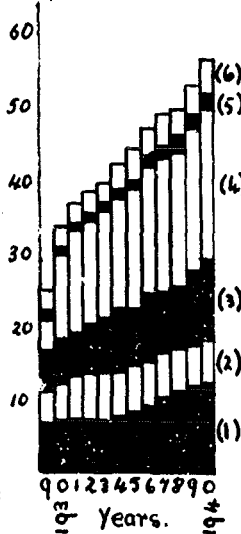


Based on T53.

977

# ASSURANCE CO. ASSETS

£NZ;M.

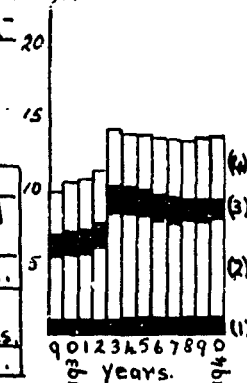


Based on T54.

978

# FIRE INSUR- ANCE CO ASSETS

£NZ;M.

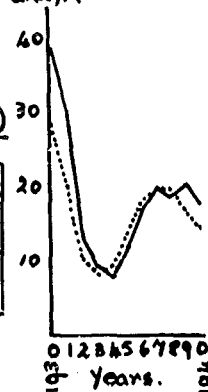


Based on T55.

979

# MORTGAGES REGISTERED & DISCHARGED

£NZ;M.

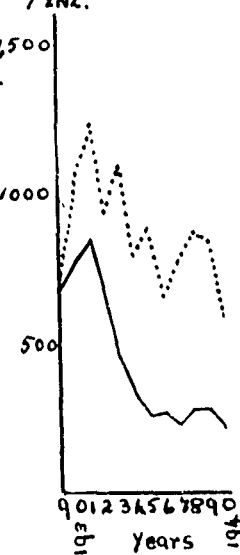


Based on T58.

980

# BANKRUPTCY

No/£NZ.



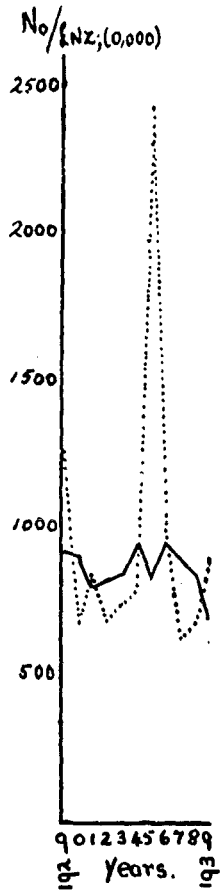
Based on  
T59.

981

# NEW JOINT STOCK COS.

Based on T50.

KEY	
	No. of New Cos.
	Agg. Nominal Capital of New Cos.

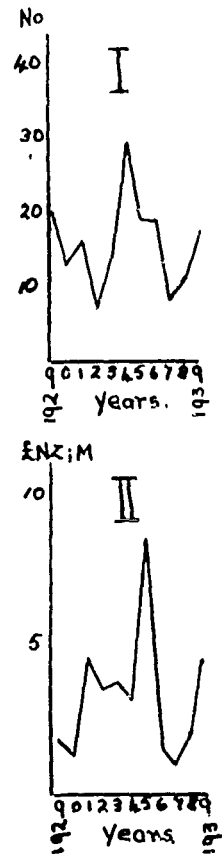


982

# NEW FOREIGN JOINT STOCK COS IN NZ.

Based on T50.

KEY	
I	No. of New Foreign Cos Reg. in NZ.
II	Capital of New Foreign Cos Reg. in NZ.

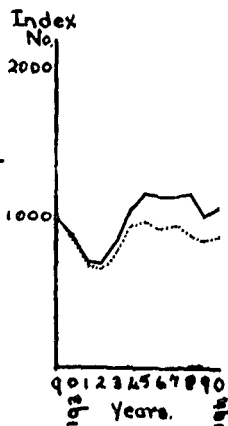


983

# SHARE PRICE INDEX NOS.

Based on T57.

KEY	
	Ind. Shares
	All Shares.



984

# PATENTS ETC. REG- ISTERED.

Based on T60.

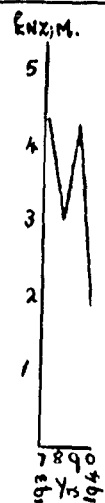
KEY	
	Patents
	Trade Mks.
	Designs.



985

# SAC NEW BUSINESS

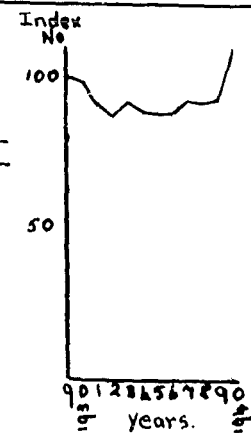
Based on T41.



986

# IMPORTS PRICE IN- DEX NOS.

Based on T43.



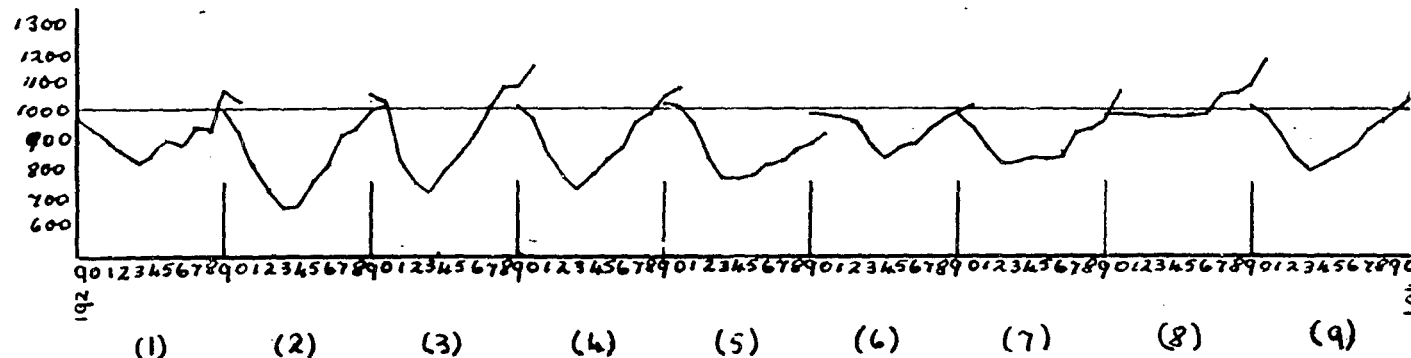
Based on Tc2.

## RETAIL PRICE INDEX NOS.

Base: Av. 1926-30 = 1000

588

KEY	
(1)	Groceries
(2)	Dairy Produce.
(3)	Meat
(4)	Three Food Groups.
(5)	Rent
(6)	Fuel & Light.
(7)	Clothing, Drapery & Footwear.
(8)	Miscellaneous.
(9)	All Groups Combined.



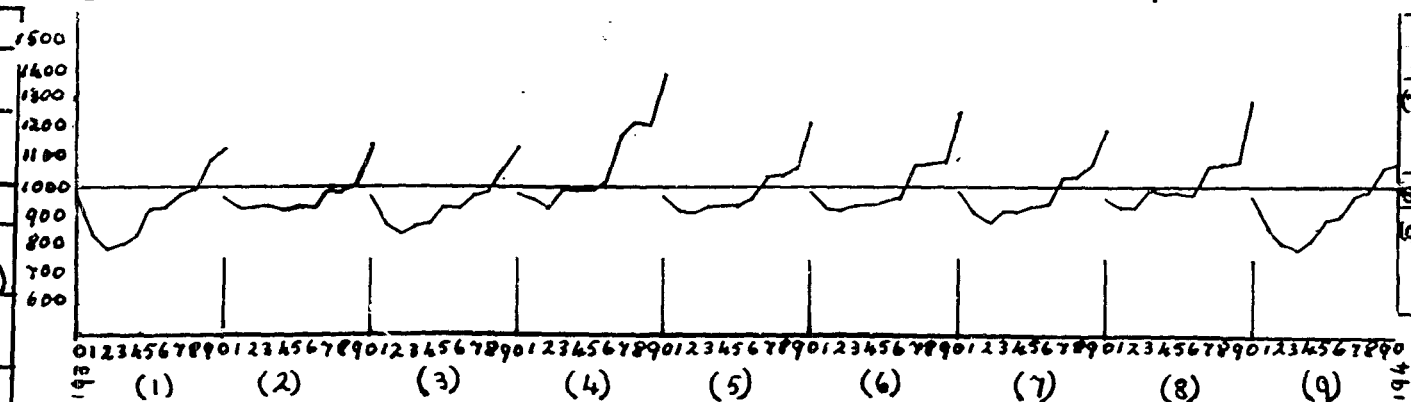
Based on T61.

## WHOLE-SALE PRICE INDEX NOS.

Base: Av. 1926-30 = 1000

587

KEY	
(1)	Consumer Goods: Food-stuffs. (Class I.)
(2)	Consumer Goods: Non-Foodstuffs. (Class II.)
(3)	Classes I & II Comb. ed.
(4)	Producer Goods: Building & Const. Materials (Class III.)
(5)	Prod. Goods: Materials for Other Ind. (Class IV.)
(6)	Classes III & IV Combined.



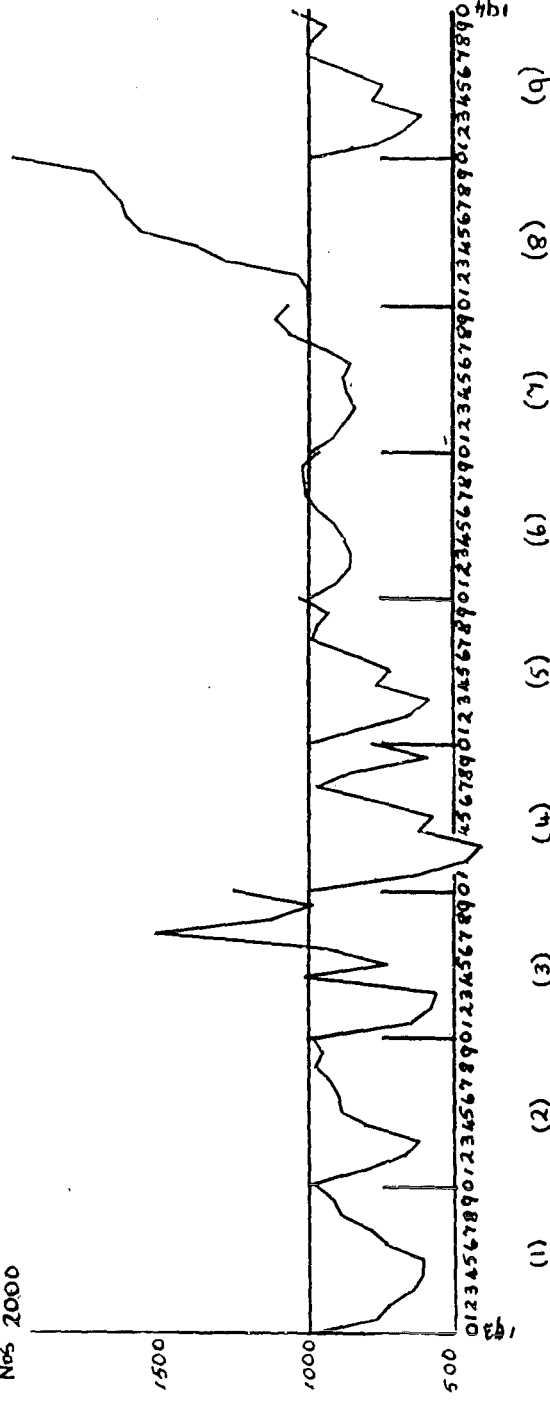
KEY - cont.	
(7)	Classes I to IV Comb. ed.
(8)	Imports
(9)	Locally Prod. Goods.

## EXPORT PRICES INDEX NOS.

Base: 1930 = 1000

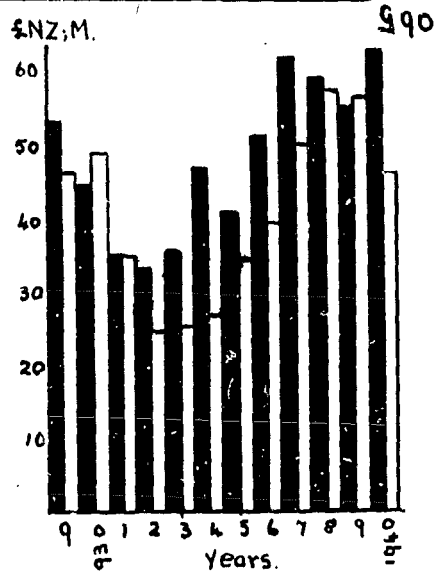
Index  
Nos 2000

KEY.	
(1)	Group I: Dairy Produce
(2)	Group II: Meat
(3)	Group III: Wool
(4)	Group IV: Other Rest - Total Produce
(5)	Groups I to IV Combined
(6)	Group V: Agricultural Produce
(7)	Group VI: Timber
(8)	Group VII: Minerals
(9)	All Groups Combined



Based on Total

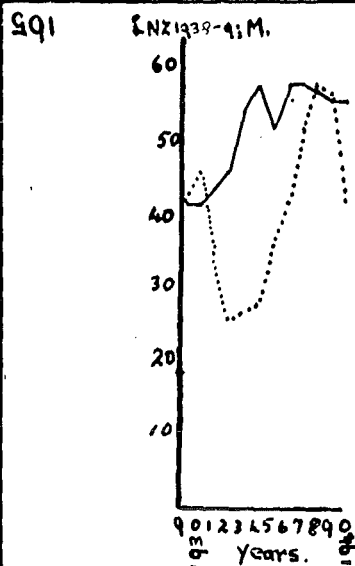
# VALUE OF N.Z. IM- PORTS & EXPORTS.



Based on T1.

Exports Imports

# VOLUME OF NZ IM- PORTS & EXPORTS

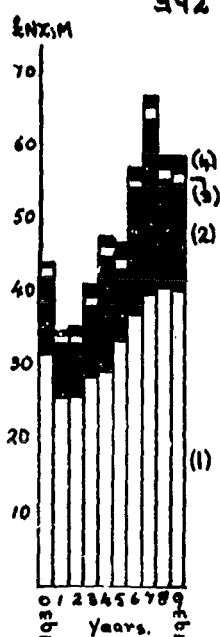


Based on T1.

Exports Imports

## EXPORTS CLASSIFIED ACCORDING TO TYPE.

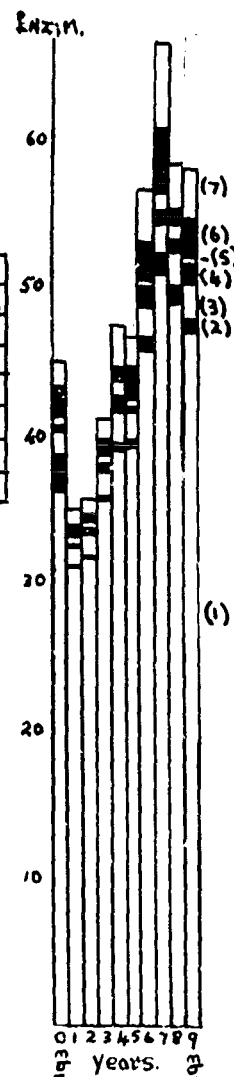
KEY	
(1)	Food, Drink & Tobacco.
(2)	Raw Materials & Articles Mainly unmanufactured.
(3)	Articles wholly or Mainly Manufactured.
(4)	Miscellaneous & Bullion.



Based on T66.

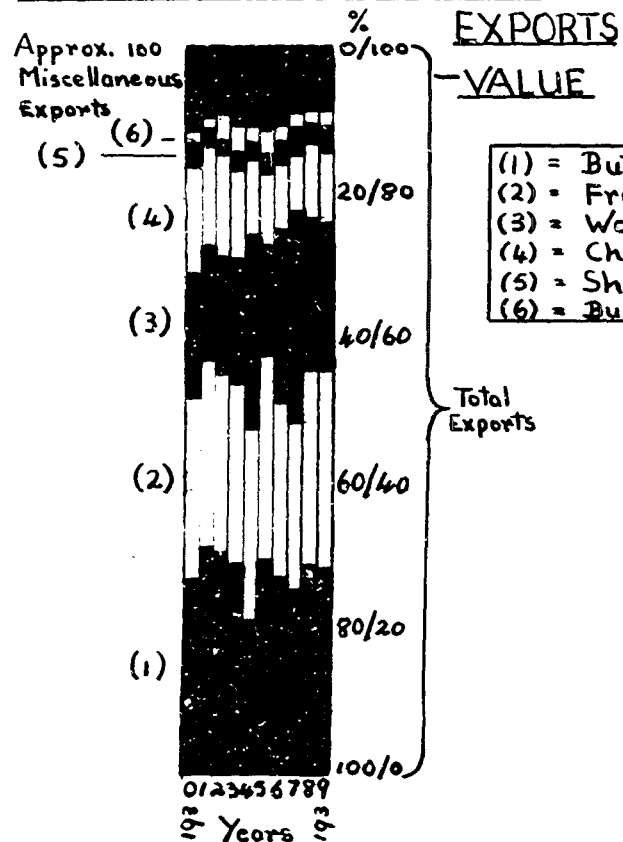
## EXPORTS CLASSIFIED ACCORDING TO IMPORT- ING COUNTRY.

KEY	
(1)	United Kingdom
(2)	Canada
(3)	Australia
(4)	France
(5)	Germany
(6)	U.S.A.
(7)	Others.



Based on T66.

# CHANGES IN THE RELATIVE IMPORTANCE OF N.Z.'s MAJOR EXPORTS



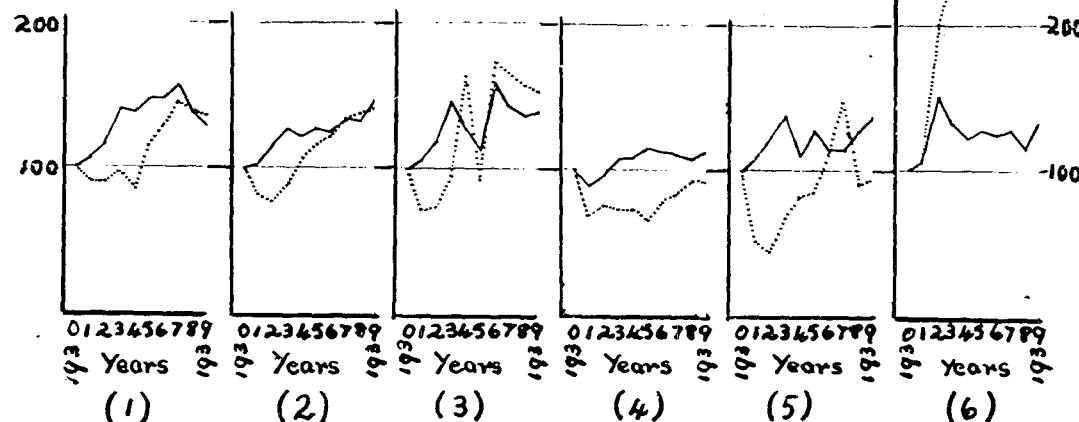
- (1) = Butter.
- (2) = Frozen Meat.
- (3) = Wool.
- (4) = Cheese.
- (5) = Sheep Skins and Pelts.
- (6) = Bullion.

# CHANGES IN THE VOLUME AND VALUE OF N.Z.'s SIX MAJOR EXPORTS, 1930-1939.

Index Nos. Graphed. Base: 1930 = 100

Volume.
Value.

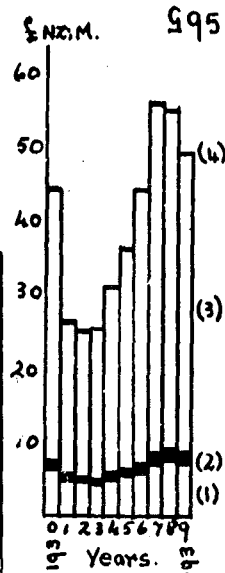
Based on T67.



EXPORTS CLASSIFIED ACCORDING TO ITEMS

# IMPORTS CLASSIFIED ACCORDING TO TYPE.

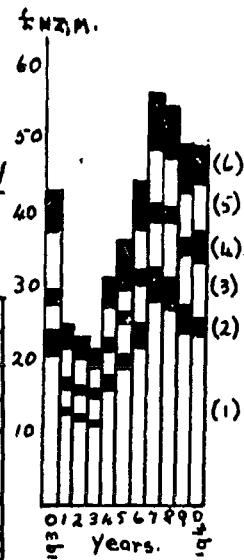
KEY.	
(1)	Food, Drink & Tobacco.
(2)	Raw Materials & Articles Mainly Unmanufactured.
(3)	Articles wholly or Mainly Manuf.
(4)	Miscellaneous, Including Bullion.



Based on T69.

# IMPORTS CLASSIFIED ACCORDING TO COUNTRY OF ORIGIN.

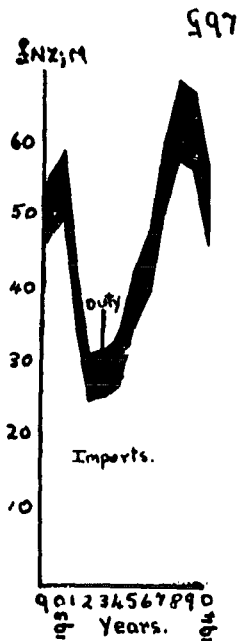
KEY.	
(1)	United Kingm.
(2)	Canada.
(3)	Australia.
(4)	Other British Possessions, Protectorates, etc.
(5)	U.S.A.
(6)	Other Non-British Countries.



Based on T71.

# IMPORTS & CUSTOMS DUTY.

Based on T72.



Based on T73.

FARM VOLUME, PRICE &  
VALUE INDEX NOS

160

140

130

120

110

100

90

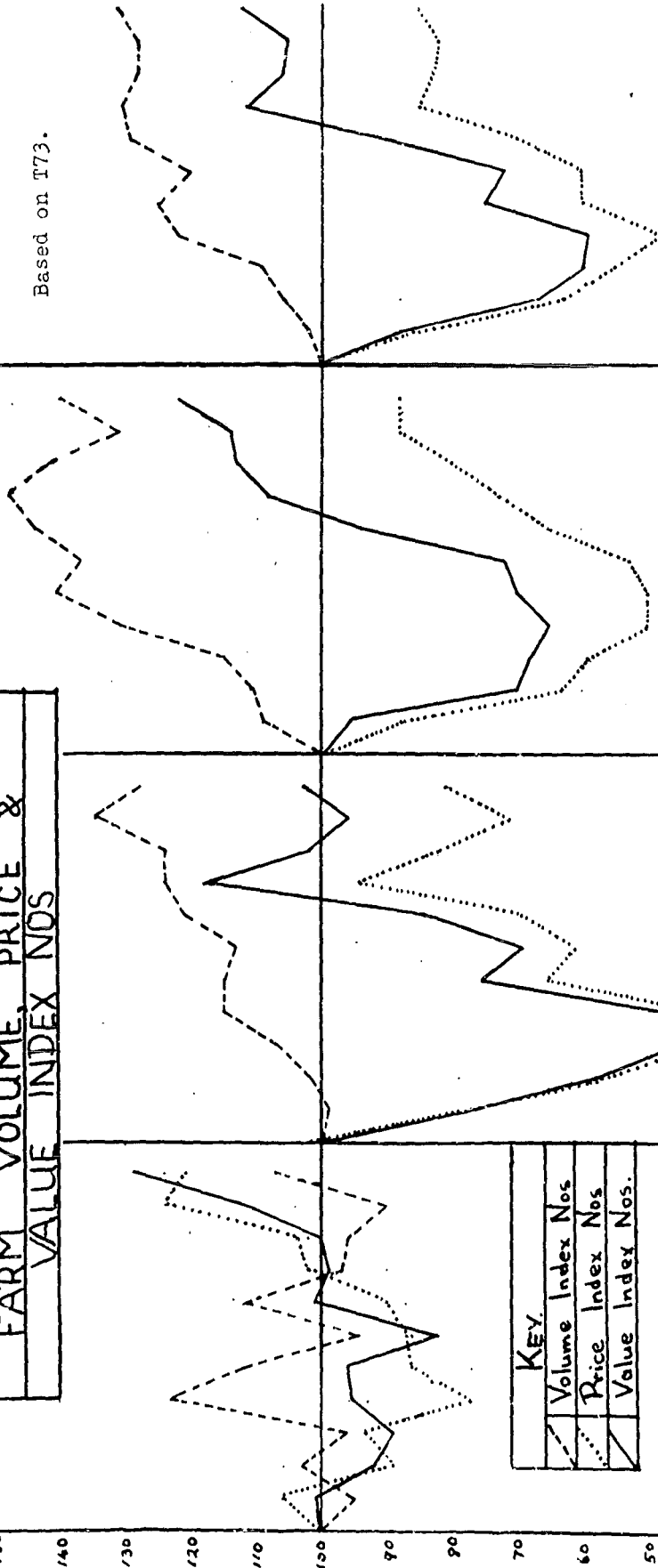
80

70

60

50

KEY									
Volume Index Nos									
Price Index Nos									
Value Index Nos.									

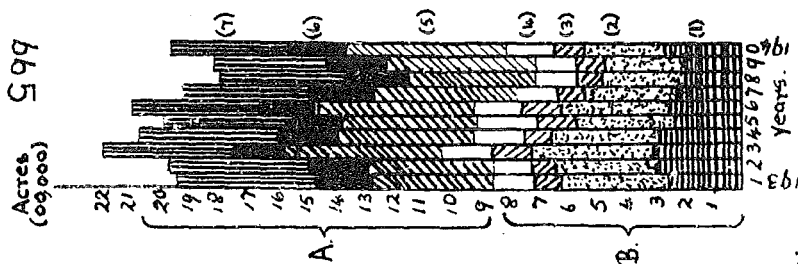


1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940

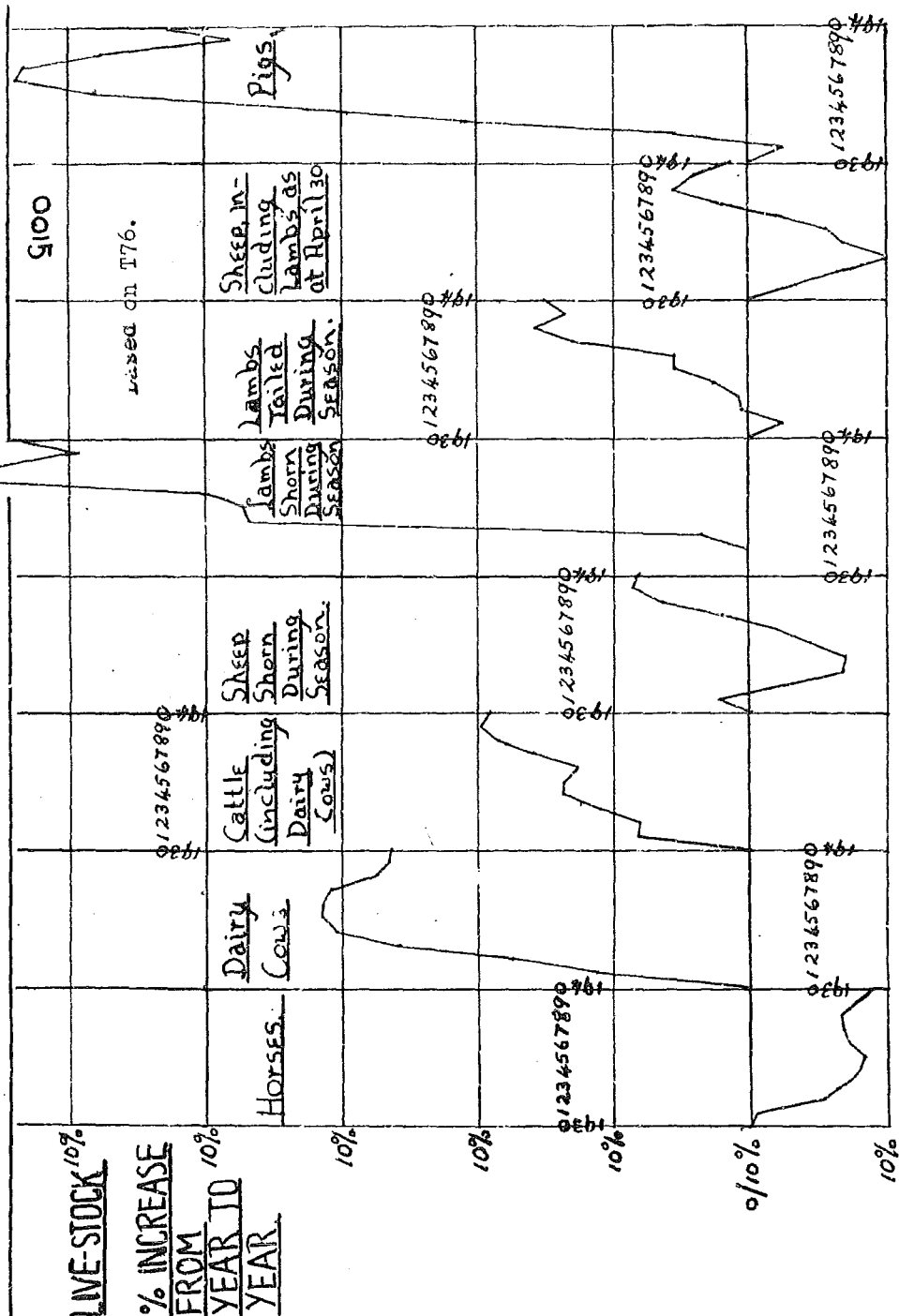
Agricultural Prod. Pastoral Prod. Dairying, Poultry, Bees. All Farm Income



	KEY.
(1)	Wheat
(2)	Oats
(3)	Grass Seed.
(4)	Other, (mainly cash) Crops.
(5)	Hay, Ensilage etc Pasture
(6)	Green Fodder
(7)	Turnips.
A	Pastoral Crops.
B.	Agricultural Crops.



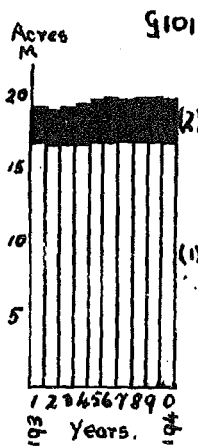
4253



## AREA UNDER CULTIVATION

KEY	
(1)	Pasture Land
(2)	Non-Pasture land

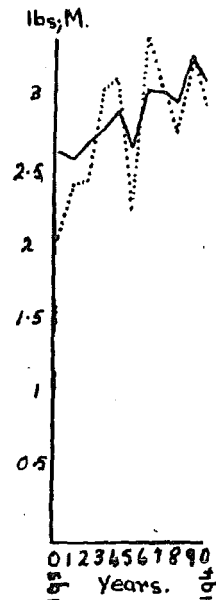
Based on T77.



## PRODUCTION & EXPORT OF WOOL

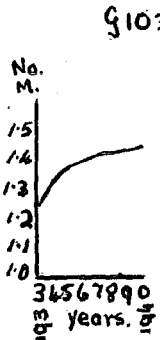
KEY	
/	Production
...	Export.

Based on T78.



## COW POPULATION

Based on T79.

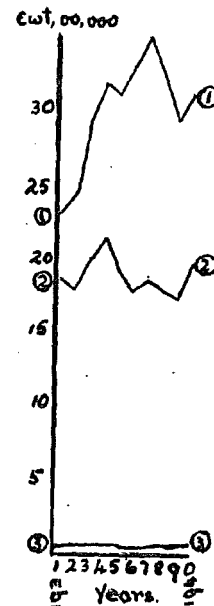


§104

## DAIRY PRODUCTION

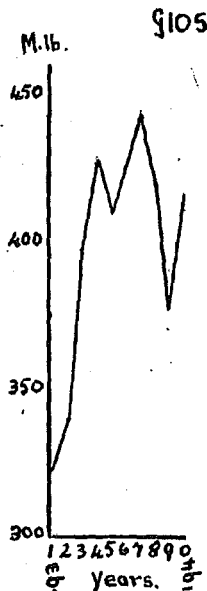
KEY	
①	Creamery Butter
②	Cheese
③	Whey Butter.

Based on T80.



## TOTAL BUTTER-FAT PRODUCTION

Based on T82.

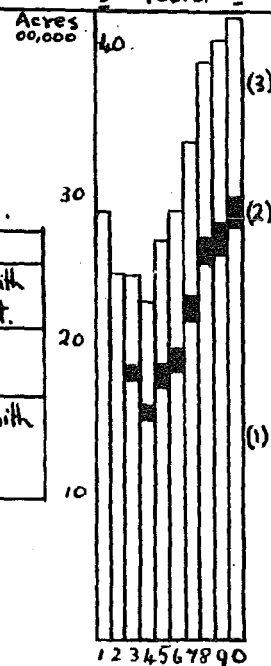


§107

## TOP-DRESSING OF LAND

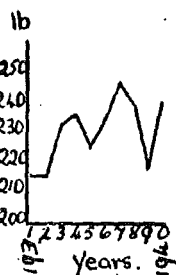
Based on T85.

KEY	
(1)	Top Dressed with Artificial Fert.
(2)	Top Dressed with Lime.
(3)	Top Dressed with Art. Fert. & Lime.



## BUTTER-FAT PRODUCTION PER COW.

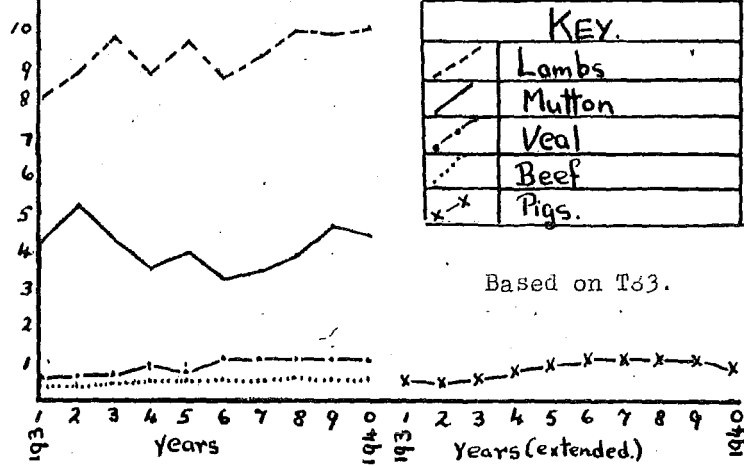
Based on T81.



# SLAUGHTERINGS

9108

Carcasses  
M.

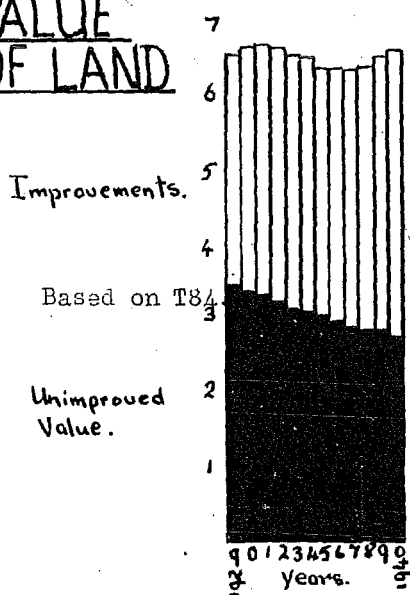


KEY.	
- - -	Lambs
- - -	Mutton
...	Veal
- - -	Beef
x-x-x	Pigs.

## VALUE OF LAND

£NZ; 00M.

9109

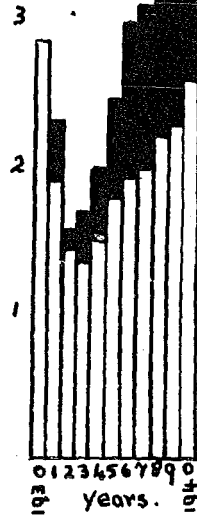


## OUTPUT OF TIMBER

Board ft  
00M.

KEY	
-	Private Output
-	State Output.

Based on T89

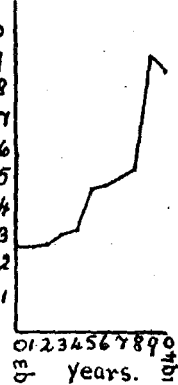


## FORESTRY ASSETS & LIABILITIES

£NZ; M.

9111

Based on T91.

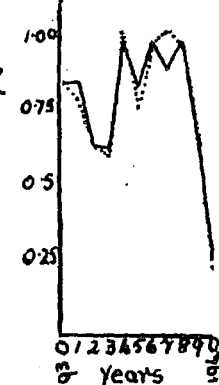


## FORESTRY RECEIPTS & PAYMENTS

£NZ; M.

KEY	
-	Receipts
-	Payments.

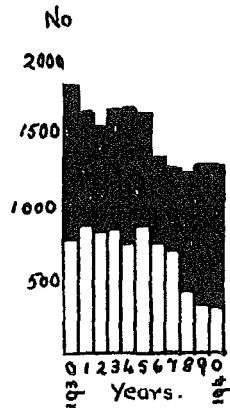
Based on T92.



# NO. OF FISHING VESSELS

KEY
Whole Time
Part Time

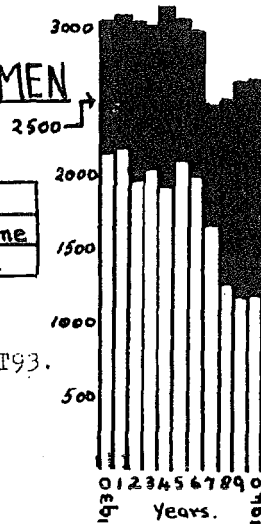
Based on T93.



# NO. OF FISHERMEN

KEY
Whole Time
Part Time

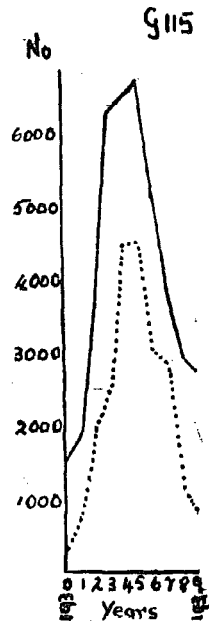
Based on T93.



# GOLD (I)

KEY
No of Miners
No of Mines, Claims, Dredges etc.

Based on T94.



# GOLD II

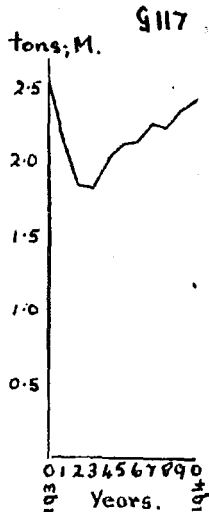
KEY
Quantity (oz)
Value (£NZ.)

Based on T94.



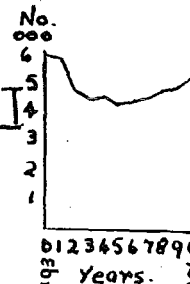
# COAL OUTPUT

Based on T95.



# COAL EMPLOYMENT

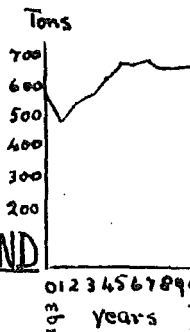
Based on T95.



# COAL OUTPUT PER WORKER EMPLOYED UNDER-GROUND

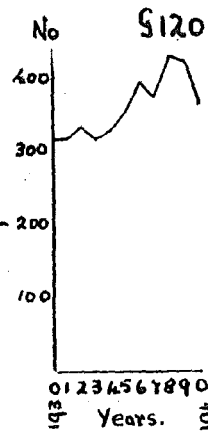
Based on T95.

# COAL OUTPUT PER WORKER EMPLOYED UNDER-GROUND



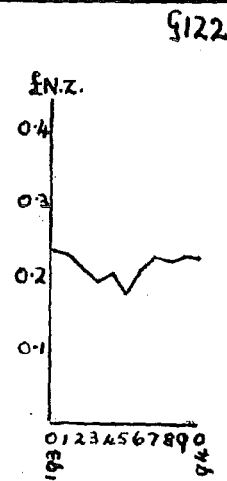
# NO. OF STONE QUARRIES

Based on T96.



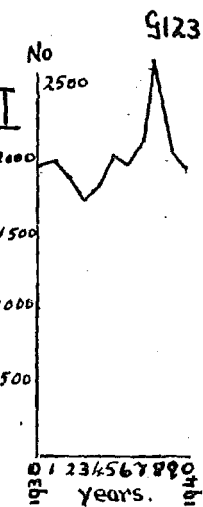
# VALUE PER TON OF QUARRIED STONE

Based on T96.



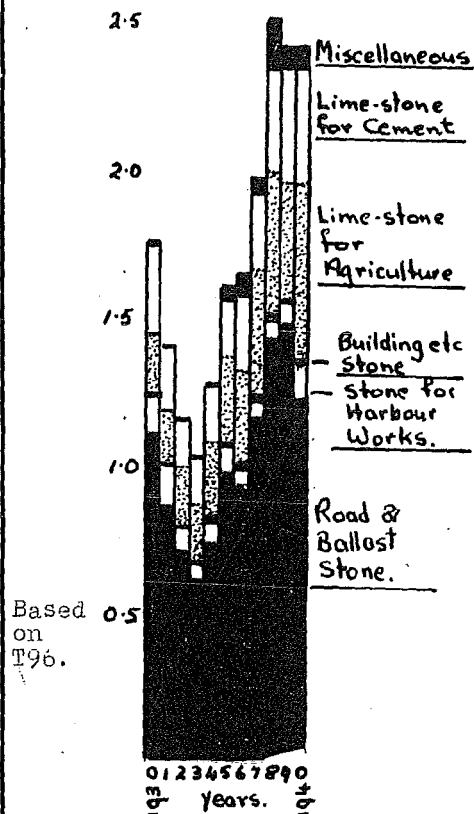
# EMPLOYMENT IN QUARRIES.

Based on T96.



# STONE QUARRIES PRODUCTION

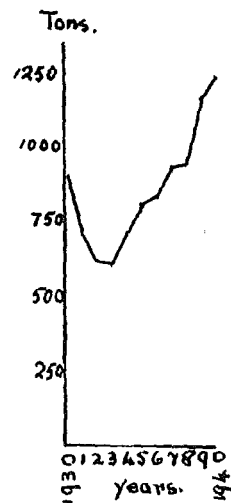
Tons; M.



Based on T96.

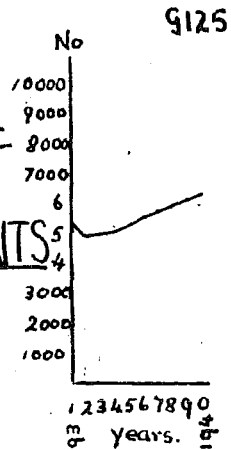
# OUTPUT PER WORKER.

Based on T96.



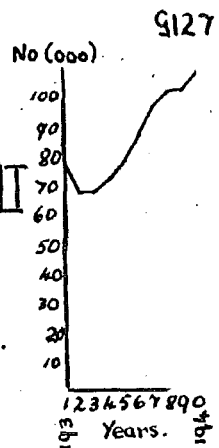
# TOTAL NO. OF INDUST- RIAL EST- ABLISHMENTS

Based on T97.



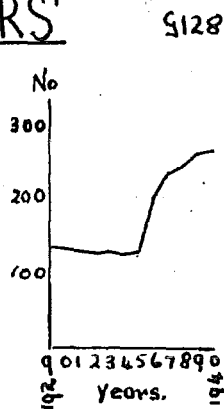
# TOTAL INDUSTRIAL EMPLOYMENT

Based on T100.

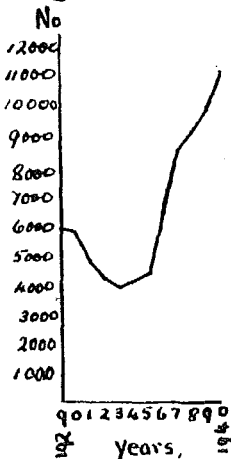


# EMPLOYERS' UNIONS.

Based on T101.



# TOTAL UNION MEMBER- SHIP



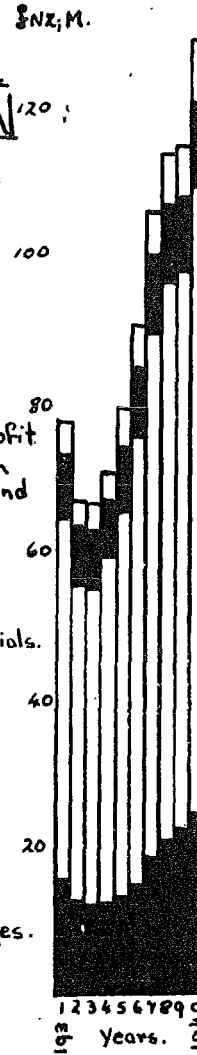
# INDUSTRIAL PRODUCTION

Based on T104.

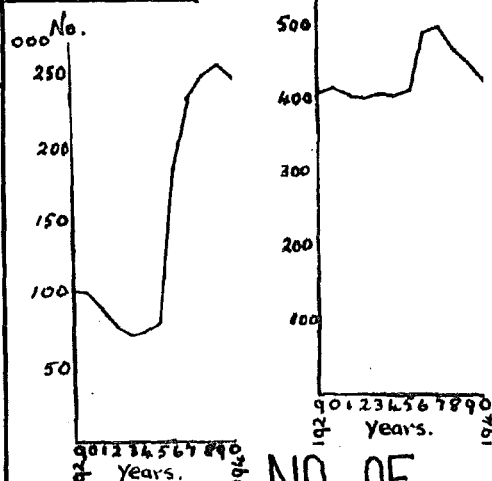
Expenses other than  
Cost of Materials and  
Salaries & Wages.

Cost of Materials.

Salaries & Wages.



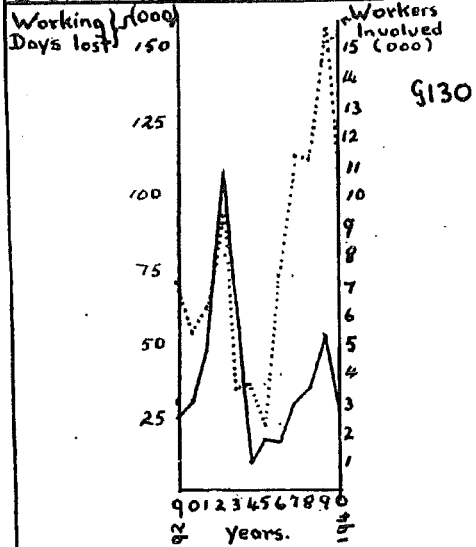
# EMPLOYEES' UNIONS



# MEMBER- SHIP

Based on T101.

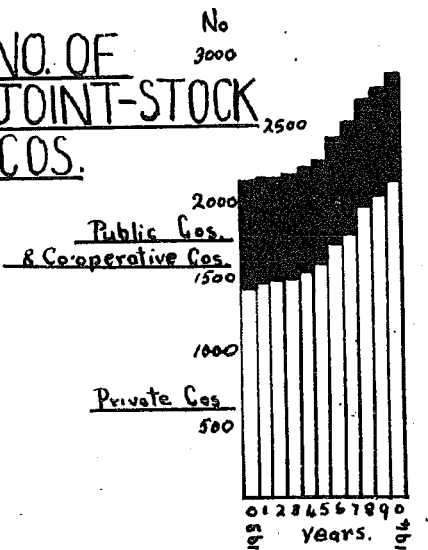
# EFFECT OF LOCK-OUTS & STRIKES



KEY	
	Working Days lost
	Workers Involved

Based on T99.

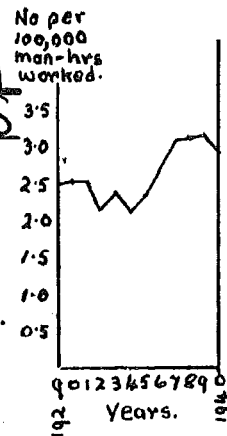
## NO. OF JOINT-STOCK COS.



9131

## INDUSTRIAL ACCIDENTS

Based on T103.



9132

Based on T99.

## CAPITAL OF JOINT-STOCK COS.

Public Cos. & Co-op. Cos.

Private Cos.

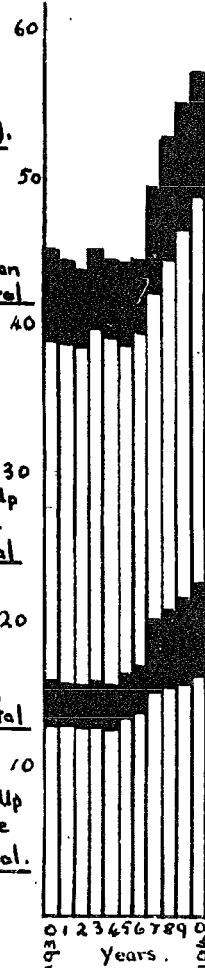
Loan Capital

Paid-Up Share Capital

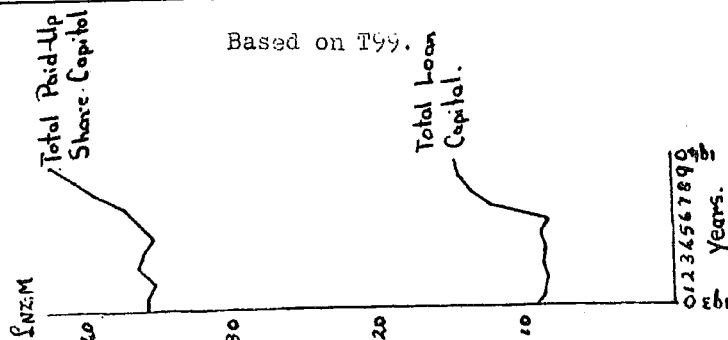
Loan Capital

Paid-Up Share Capital

£NZ; M.

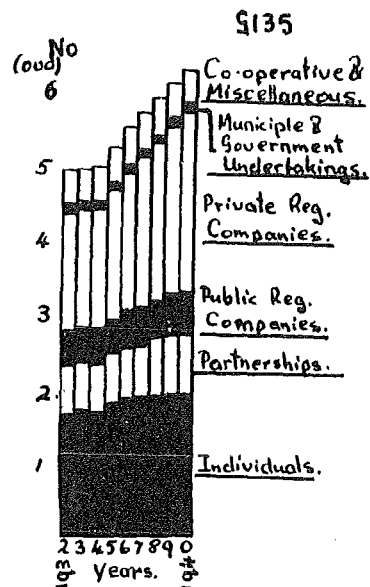


## LOAN & SHARE CAPITAL 9134



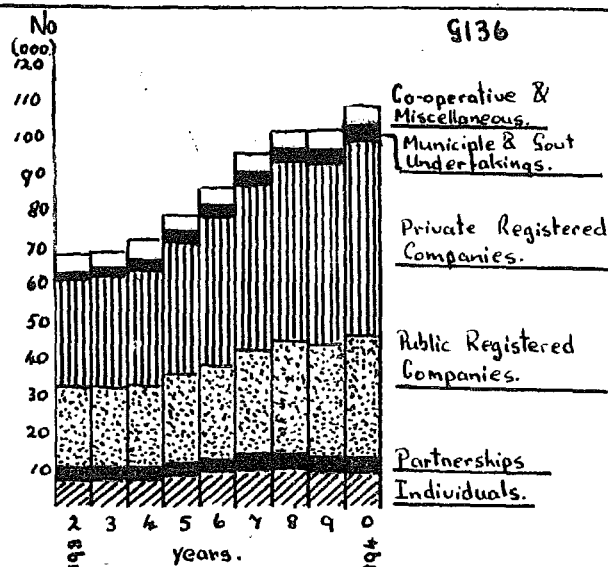
# NO. & TYPES OF BUSINESS ORGANISATION (INDUSTRIAL)

Based on T90.



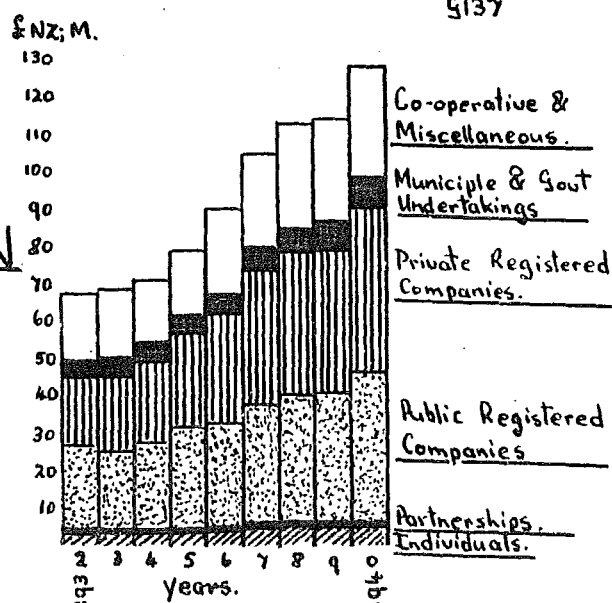
## INDUSTRIAL EMPLOYMENT BY TYPES OF BUSINESS ORGANISATION

Based on T98.



## INDUSTRIAL OUTPUT BY TYPES OF BUSINESS ORGANISATION

Based on T90.

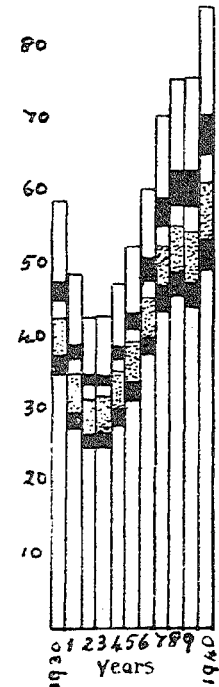




5139.

# VALUE & TYPES OF INPUTS OF MAJOR INDS.

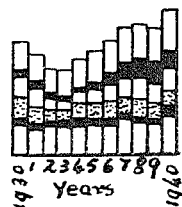
## Materials



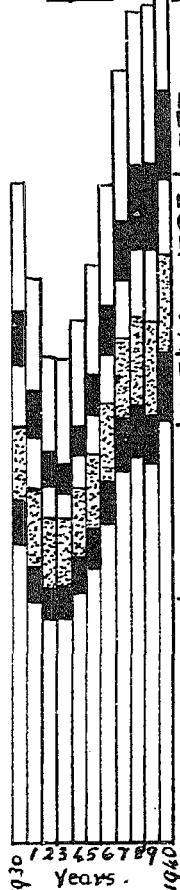
## Salaries & Wages.



## Expenses & Profits.



## Total Inputs.



## Other, Non-Major Inds.

## Major Engineering & Engineering Materials Inds.

## Major Building Materials Inds.

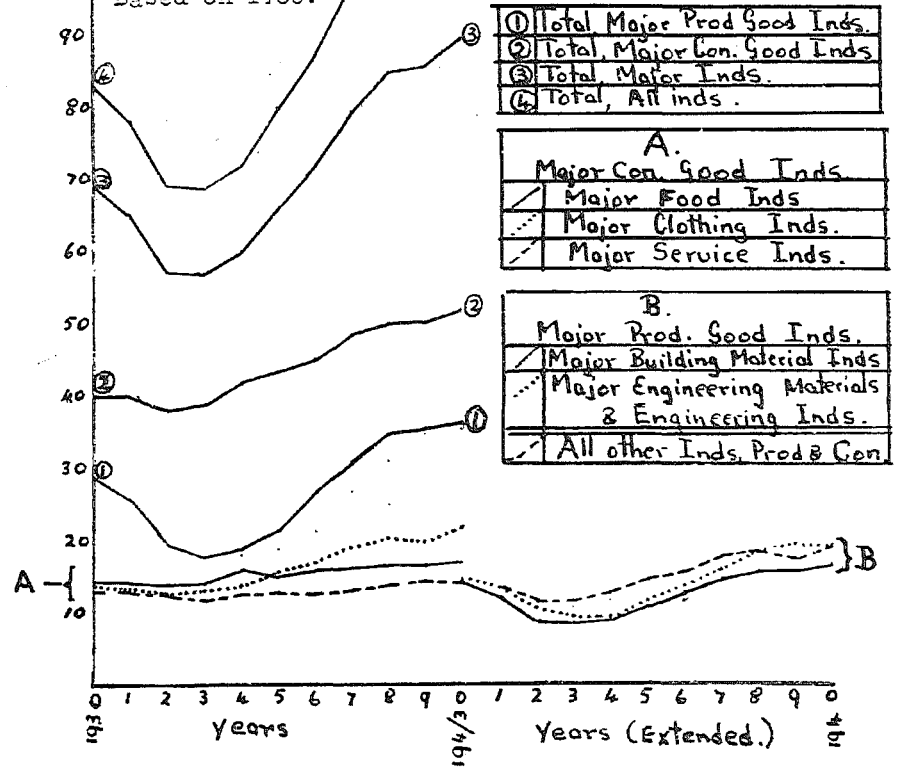
## Major Food Inds.

## Major Prod. Inds.

## Major Con. Inds.

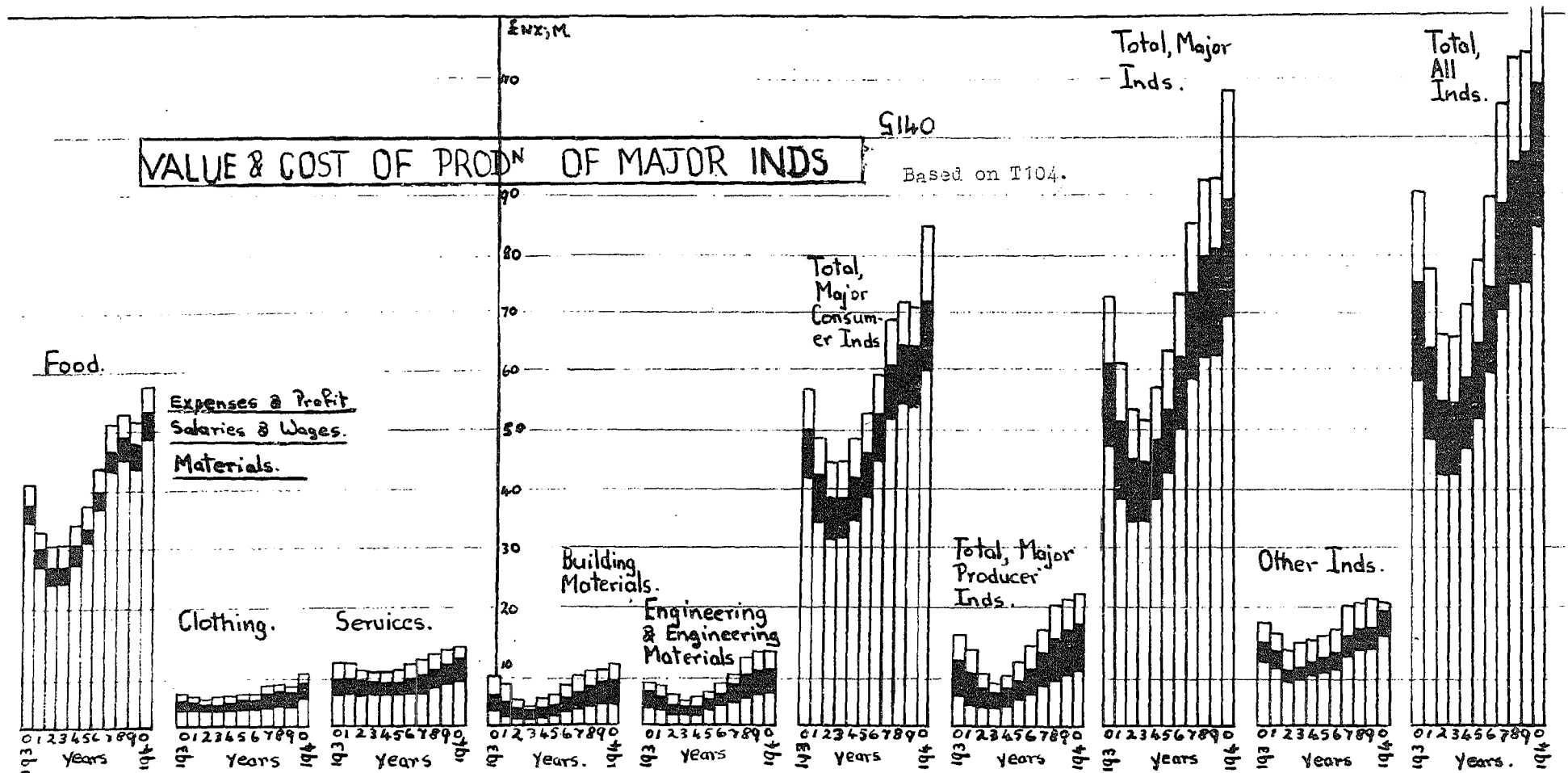
No  
(000)

Based on T100.



# EMPLOYMENT BY MAJOR INDUSTRIES.

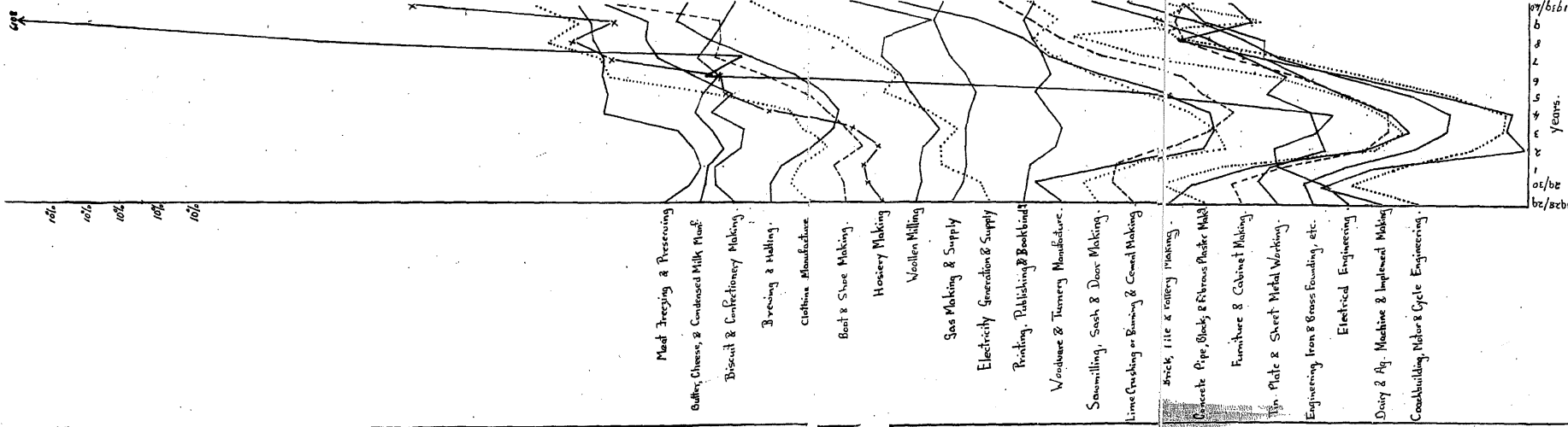
5138



# INDEX OF EMPLOYMENT IN MAJOR INDUSTRIES

5141

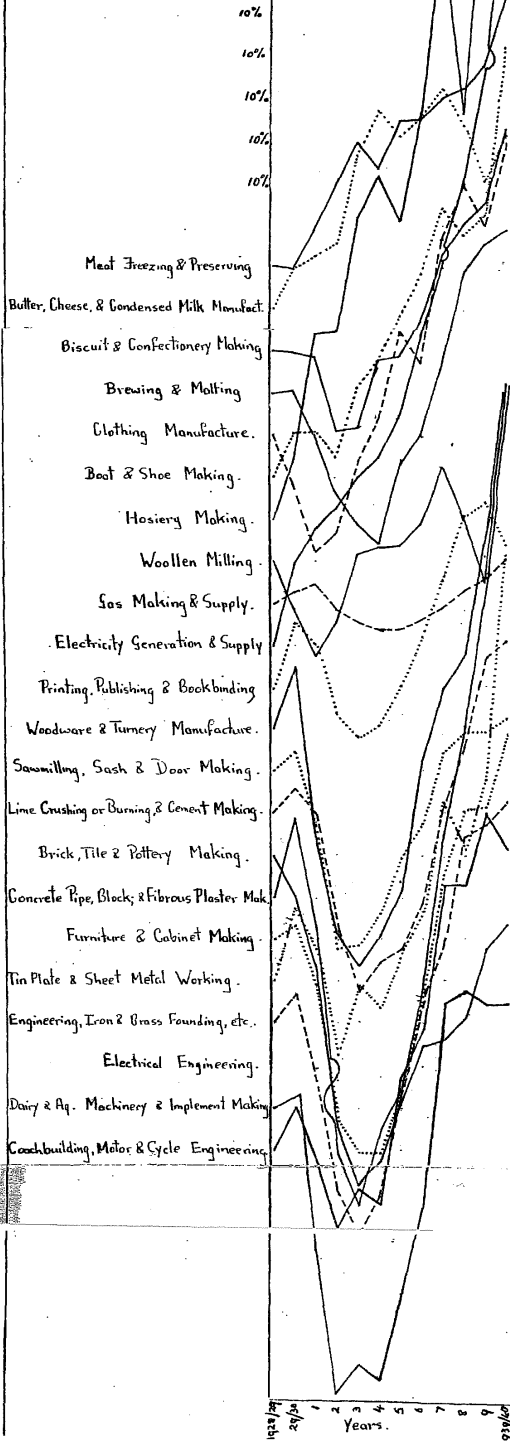
Based on 1910.



# INDEX OF VOLUME OF PRODUCTION OF MAJOR INDUSTRIES

51142

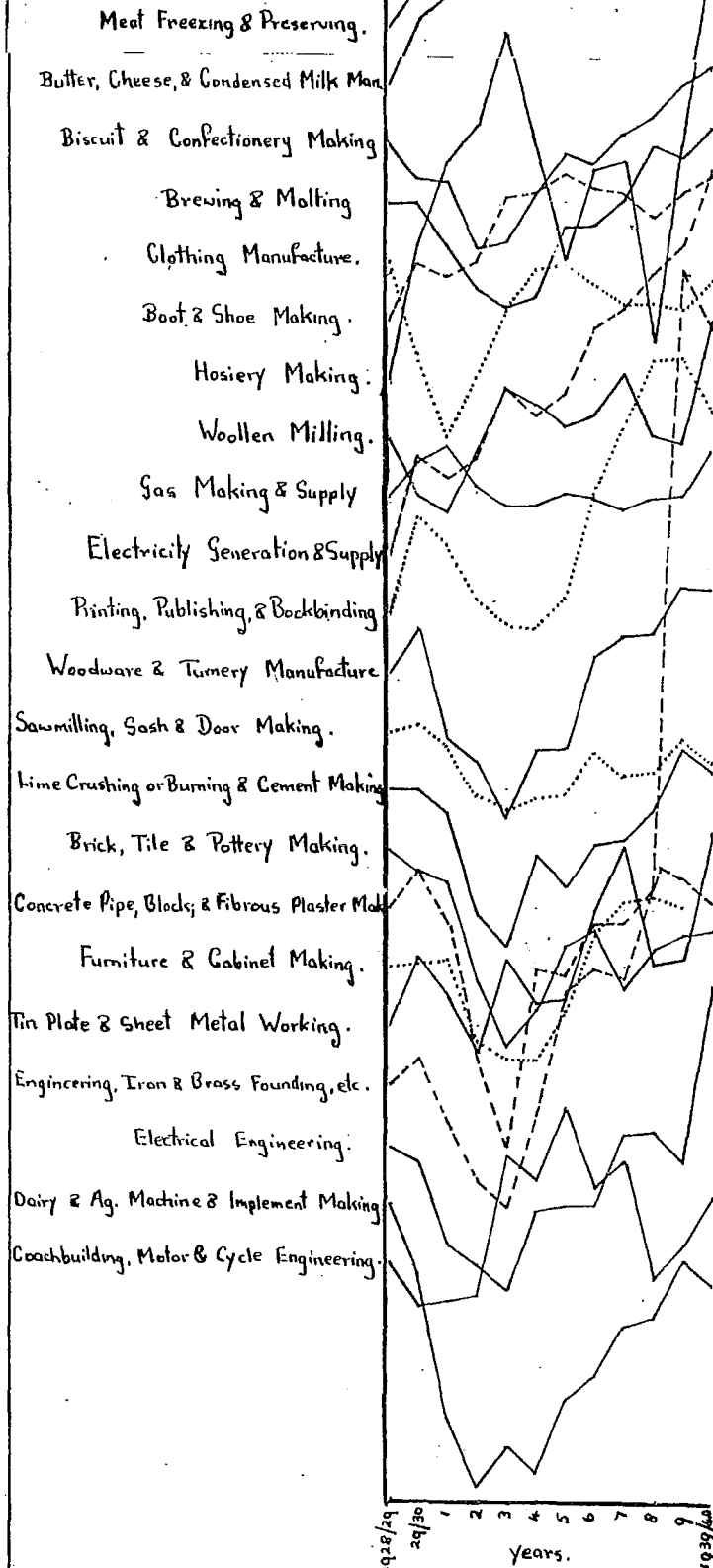
Based on T105.



# INDEX OF PRODUCTIVITY OF MAJOR INDUSTRIES

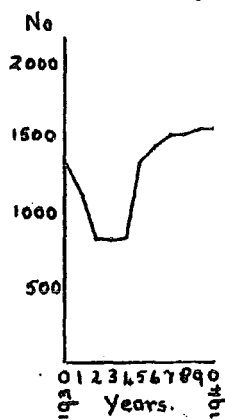
51143

Based on T106.



# NO OF BUILDING ESTABLISHMENTS

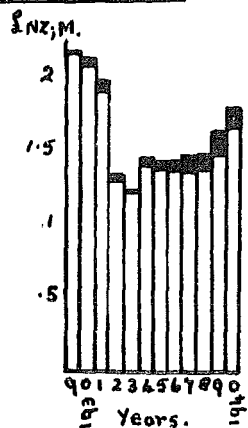
9144



Based on T106

# CAPITAL ENGAGED IN BUILDINGS

9145

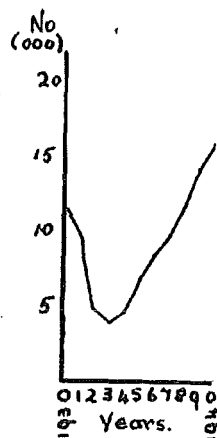


KEY	
White bar	Paid-Up Share Capital
Black bar	Loan Capital, excluding Bank O.D.s.

Based on T109.

# BUILDING EMPLOYMENT

9146

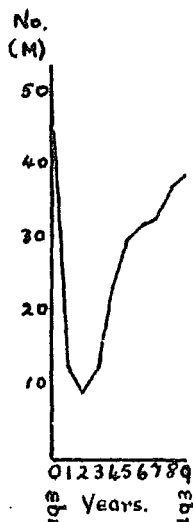


Based on T106.

# PRODUCTION OF BUILDING MATERIALS

9147

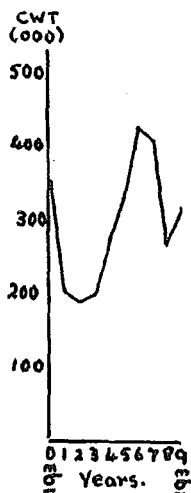
## BUILDERS' BRICKS.



Based on T107.

9148

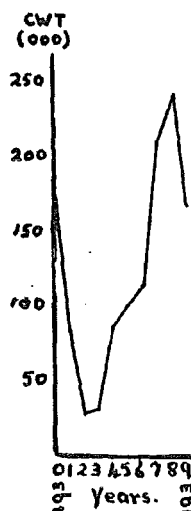
## CORRUGATED IRON



Based on T107

9149

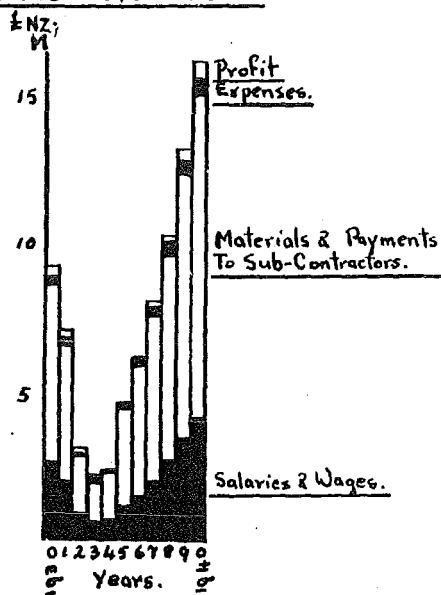
## CHANNEL & GIRDER IRON



Based on T107.

## COST OF BUILDING PRODUCTION

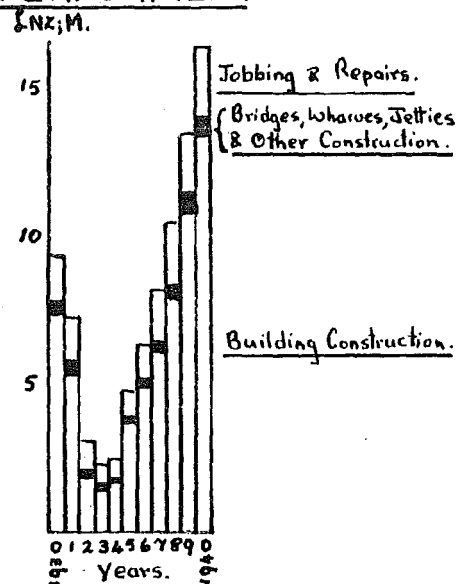
9150



Based on T110.

## BUILDING; VALUE & TYPE OF WORK PERFORMED.

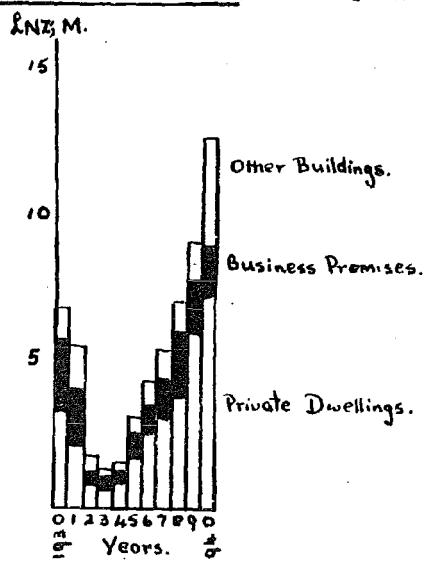
9151



Based on T111.

## BUILDING; VALUE & TYPE OF BUILDINGS COMPLETED.

9152



Based on T112.

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TABLE 1.

Years Ended 31.3.	Aggregate Private Income £N. Z. m.	Real National Income £NZm. 1932.	Value of Goods Available for Consumption.										Volume of goods available for Consumption																																							
			Produced in New Zealand								Imported.		Available for Use in New Zealand				Excess of Agg. Private Income over Goods avail. for Con.		Excess of N. Z. Prod- uce over Goods avail. for consumpt. £NZm	Produced in N. Z.				Imported		Total Goods Available for Use in New Zealand																										
			Total		Exported.		Available for use in N. Z.		£NZm	Index Nos.	£NZm	Index Nos.	Total	Per Head.	£NZm	% of Goods avail for consumpt.	£NZm	Index Nos.		£NZm.	Index Nos.	Available for use in New Zealand		£NZm	Index Nos.	£NZm	Index Nos.	% Locally Produced	% Imported	Index No. Av. Vol. per Head	Index Nos. - Goods Other than Capital																					
			£NZm	Index Nos.	£NZm	Index Nos.	£NZm.	Index Nos.														£NZm	Index Nos.								£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	£NZm	Index Nos.	Total	Per Head
1929			126.2	100	53.9	100	73.3	100	46.5	100	118.8	100	81.1	100	100	100			7.4	107.1	100	41.7	100	65.4	100	41.9	100	107.3	100	61	39	100	100	100																		
1930			120.5	95	45.1	84	75.4	104	49.3	106	124.7	106	84.1	104	105	105			4.2	111.1	104	41.1	99	70.0	107	45.6	109	115.6	108	61	39	107	108	109																		
1931			97.2	77	35.4	66	61.8	86	35.1	76	96.9	82	64.4	79	82	81			0.3	105.8	99	43.4	104	62.4	95	34.1	81	96.5	90	65	35	88	94	92																		
1932	99.7	99.7	83.3	66	33.3	62	50.0	70	24.7	54	74.7	63	49.1	61	67	65	25.0	33.5	8.6	101.8	95	45.6	109	56.2	86	25.7	61	81.9	76	69	31	74	82	80																		
1933	91.0	95.7	83.7	66	36.0	67	47.7	66	25.3	55	73.0	61	47.6	59	66	64	18.8	25.8	10.7	111.1	104	53.9	129	57.2	88	26.1	62	83.3	78	69	31	74	85	80																		
1934	101.3	105.0	98.4	78	47.1	87	51.3	72	26.7	57	78.0	66	50.5	63	69	66	23.3	29.9	20.4	116.5	109	57.3	137	59.2	91	27.5	66	86.7	81	69	31	74	85	80																		
1935	106.6	106.8	96.7	77	41.3	77	55.4	77	34.3	74	89.7	76	57.6	71	77	74	16.9	18.8	7.0	116.5	109	51.7	124	64.8	99	35.7	85	100.5	94	68	32	76	85	80																		
1936	124.6	121.0	113.8	90	51.6	96	62.2	86	39.5	85	101.7	85	64.8	80	85	79	22.9	22.5	12.1	125.9	118	57.3	137	68.6	105	41.6	99	110.2	103	64	36	88	95	90																		
1937	157.5	141.8	135.3	107	62.0	115	73.3	102	50.1	109	123.4	105	78.0	97	101	93	34.1	27.6	11.9	132.6	124	57.8	139	74.8	114	51.6	123	126.4	118	59	41	95	101	96																		
1938	173.3	150.3	134.5	107	59.4	110	75.1	104	57.5	124	132.6	111	82.9	102	104	96	40.7	30.7	1.9	133.9	125	56.2	135	77.7	119	57.5	137	135.2	126	57	43	109	125	108																		
1939	185.8	152.4	133.9	106	55.6	103	78.3	109	56.5	122	134.8	114	83.4	103	103	94	51.0	37.8	9.9	133.9	125	55.6	133	78.3	120	56.5	135	134.8	126	58	42	115	121	113																		
1940	200.2	153.4	142.8	113	63.3	117	79.5	111	46.1	100	125.6	106	76.7	95	94	85	74.6	59.4	17.2	139.3	130	55.6	133	83.7	128	41.9	100	125.6	117	67	33	105	112	109																		

Compiled from figures given in the following sources:-  
 1942 Year Book, PP180,181,182,183. Some of the index numbers have been calculated from these figures. The Real National Income figures were calculated as follows:-  
 (a) (1) Take total retail price index  
 (2) Recalculate so that 1932 = 1000  
 (3) Subtract these from 2000  
 (4) Express as a decimal of 1000  
 (b) (1) Take the aggregate Private Income Figures  
 (2) Multiply them by (a) (4) above.

See also Gs 1,2,4,5,63,90,91.

TABLE II.

## VALUE OF GOODS AVAILABLE FOR CONSUMPTION.

Years ended 31.3	Agriculture	Pastoral	Poultry, dairying & Bees.	Mining	Fisheries	Forestry	Factory	Building & Miscellaneous	Total
£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
1929	9.9	43.1	29.3	3.6	0.5	3.4	24.0	12.4	126.2
1930	9.1	36.1	28.4	3.7	0.6	3.6	25.6	13.4	120.5
1931	8.8	24.6	22.2	3.6	0.5	2.9	23.3	11.3	97.2
1932	8.0	19.3	21.9	3.4	0.4	1.7	18.6	10.0	83.3
1933	8.0	20.4	21.2	3.4	0.4	1.7	17.7	10.0	83.7
1934	8.7	32.1	22.5	3.5	0.4	2.0	18.6	10.6	98.4
1935	7.9	28.3	23.0	3.8	0.4	2.6	20.7	10.0	96.7
1936	9.2	34.5	28.8	4.0	0.4	3.0	23.2	10.7	113.8
1937	8.8	47.1	32.7	4.0	0.5	3.6	26.7	11.9	135.3
1938	8.6	40.7	33.8	4.2	0.6	4.1	30.0	12.5	134.5
1939	9.2	37.4	33.8	4.4	0.6	4.0	30.4	14.0	133.9
1940	10.1	38.4	35.9	4.9	0.6	4.4	33.5	15.0	142.8
Percentages of Total									
1929	7.84	34.15	23.22	2.85	0.40	2.69	10.02	9.83	100.00
1930	7.55	29.96	23.57	3.07	0.50	2.99	21.24	11.12	100.00
1931	9.05	25.31	22.84	3.70	0.51	2.98	23.98	11.63	100.00
1932	9.60	23.17	26.29	4.08	0.48	2.04	22.33	12.01	100.00
1933	10.63	24.37	35.33	4.06	0.48	2.03	21.15	11.95	100.00
1934	8.84	32.62	22.87	3.56	0.41	2.03	18.90	10.77	100.00
1935	8.17	29.27	23.78	3.93	0.41	2.68	21.42	10.34	100.00
1936	8.08	30.32	25.31	3.51	0.35	2.64	20.39	9.40	100.00
1937	6.50	34.81	24.17	2.96	0.37	2.66	19.73	8.80	100.00
1938	6.39	30.26	25.13	3.12	0.45	3.05	22.30	9.30	100.00
1939	6.87	27.93	25.24	3.29	0.45	2.99	22.78	10.45	100.00
1940	7.07	26.89	25.14	3.43	0.42	3.08	23.46	10.51	100.00
Index Numbers									
1929	100	100	100	100	100	100	100	100	100
1930	92	84	97	103	120	106	107	108	95
1931	89	34	76	100	100	85	97	91	77
1932	81	45	75	94	80	50	78	81	66
1933	90	47	72	94	80	50	74	81	66
1934	88	74	77	97	80	59	78	85	78
1935	80	66	78	106	80	76	86	81	77
1936	93	80	98	111	80	88	97	86	90
1937	89	109	112	111	100	109	111	96	107
1938	87	94	115	117	120	121	125	101	107
1939	93	87	115	122	120	118	127	113	106
1940	102	89	123	136	120	129	140	121	113

Source:- 1942 Year Book, P774. Index Numbers have been calculated.  
See also G3.

TABLE 3.

MALE UNEMPLOYMENT

Year	Level of Unem- ployment.	On Register, Totally Un- employed.	In receipt of Part-time relief, work or sustenance.	Scheme No. Susten- 5 (ration- ance ed work) without work.	Working full-time in Indus- try with assistance from empl- oyment Provision Fund.	Total on Register wholly or partly a charge on the Unem- ployment Provision Fund.
1931	Highest	7600	43000		3990	54590
	Lowest	6700	38000	6400	6400	21100
1932	Highest	6540	45100		22010	73650
	Lowest	7000	37000		10520	54520
1933	Highest	30.9.33 4301	44743		3039	79435
	Lowest	18.2.33 5394	39963		20510	65867
1934	Highest	20.1.34 3635	35933	1087	27836	68491
	Lowest	22.12.34 2131	28303	5923	20481	56838
1935	Highest	31.8.35 2581	24817	15347	18061	60806
	Lowest	16.2.35 3187	24936	6948	18250	53321
1936	Highest	18.1.36 2233	17365	15179	21725	56502
	Lowest	19.10.36 2037	10085	20164	6786	39072
1937	Highest	31.7.37 2636	5597	22210	8236	38679
	Lowest	18.12.37 737	336	12294	13722	30089
1938	Highest	24.9.38 771	743	8061	29057	38632
	Lowest	12.3.38 1086	2735	10876	15204	29899
1939	Highest	11.3.39 649	77	7256	24087	32069

PERCENTAGES OF TOTAL

1931	Highest	13.92	78.77		7.31	100.00
	Lowest	13.11	74.36		12.53	100.00
1932	Highest	8.88	61.24		29.88	100.00
	Lowest	12.84	67.87		19.29	100.00
1933	Highest	5.41	56.33		38.26	100.00
	Lowest	8.19	60.67		31.14	100.00
1934	Highest	5.31	52.46	1.59	40.64	100.00
	Lowest	3.75	49.80	10.42	36.03	100.00
1935	Highest	4.24	40.81	25.24	29.71	100.00
	Lowest	5.98	46.76	13.03	34.23	100.00
1936	Highest	3.98	30.73	28.86	38.45	100.00
	Lowest	5.21	25.81	51.61	17.37	100.00
1937	Highest	6.82	14.47	57.42	21.29	100.00
	Lowest	2.45	11.09	40.86	45.60	100.00
1938	Highest	2.00	1.92	20.87	75.21	100.00
	Lowest	3.63	9.15	36.37	50.85	100.00
1939	Highest	2.02	0.24	22.63	75.11	100.00

INDEX NUMBERS

1931	Highest	100.00	100.00		100.00	100.00
	Lowest	88.16	88.37		160.40	93.60
1932	Highest	86	104.88		551.64	134.91
	Lowest	92.11	86.05		263.66	99.87
1933	Highest	56.59	104.05		761.69	145.51
	Lowest	70.97	92.94		514.04	120.66
1934	Highest	47.83	83.57	7.08	697.65	125.46
	Lowest	28.04	65.82	38.59	513.32	104.12
1935	Highest	33.96	57.71	120.00	452.66	111.38
	Lowest	41.93	57.99	45.27	457.40	97.67
1936	Highest	29.38	40.38	98.91	544.49	103.50
	Lowest	26.80	23.45	131.39	170.08	71.57
1937	Highest	34.68	13.02	144.72	206.42	70.85
	Lowest	9.70	7.76	80.11	343.91	55.12
1938	Highest	10.14	1.73	52.52	728.26	70.77
	Lowest	14.29	6.36	70.85	381.06	54.77
1939	Highest	8.54	0.18	47.28	603.69	58.74

Source: 1942 Year Book, P714, Index Nos. & Percentage Totals - calculated.  
See also G6.

TABLE 4.

## EMPLOYEES'S WEEKLY WAGE RATES AND HOURS OF LABOUR

## INDEX NUMBERS

Year	Retail Prices: All Groups.	Nominal Wage-rates		Effective Wage-rates		Hours of Labour	
		Males	Females	Males	Females	Males	Females
1930	981	1017	1010	1037	1030		
1931	906	942	952	1040	1051		
1932	838	864	905	1031	1080	999	1000
1933	795	833	887	1048	1116	999	1000
1934	808	839	887	1038	1098	999	1000
1935	837	858	903	1025	1079	999	1000
1936	864	950	961	1100	1112	963	1000
1937	923	1036	1015	1122	1100	890	1000
1938	951	1081	1055	1137	1109	888	1000
1939	990	1100	1103	1111	1114	888	1000
1940	1035	1130	1137	1092	1099	888	1000

Base:- Average 1926 - 30 = 1000

Sources: 1938 Year Book, P768

1942 Year Book, P673

See also G7 &amp; G8

TABLE 5.

## MIGRATION

Year Ending 31st March	Arrivals			Departures			Excess of Arrivals over Departures.		
	Males	Females	Total	Males	Females	Totals	Males	Females	Totals
1931	16718	14023	30741	13980	11652	25632	2738	2371	5109
1932	9696	8195	17891	11800	9263	21063	-2104	-1068	-3172
1933	9760	8953	18713	11663	9645	21308	-1903	-692	-2595
1934	10045	9642	19687	11401	10621	22022	-1356	-979	-2335
1935	12655	12246	24901	14080	13971	28051	-1425	-1725	-3150
1936	13375	13561	26936	13826	14224	28050	-451	-663	-1114
1937	16041	15629	31670	15547	16476	32023	+494	-847	-353
1938	19292	19446	38738	17870	18482	36352	+1422	+964	2386
1939	21569	21079	42648	18215	19470	37685	+3354	1609	4963
1940	15868	15564	31432	13070	12334	25404	+2798	3230	6028

Source:- 1941 Year Book, P40

See also G9

Excess of Arrivals and Departures, Males and Females have been calculated.

TABLE 6

## INTER-ISLAND MOBILITY OF POPULATION

Year	Arrivals in North Island	Arrivals in South Island	Excess in Favour of North Island	
			Number	% of S.I. Arrivals.
<u>Shipping Figures</u>				
1929/30	147,490	143,857	3633	2.53
1931	135,730	135,318	412	0.30
1932	110,295	108,921	1374	1.26
1933	100,573	99,823	750	0.75
1934	109,544	108,754	790	0.73
1935	121,665	118,022	3643	3.09
1936	128,352	125,935	2417	1.92
1937	144,832	141,101	3731	2.64
1938	157,589	155,417	2172	1.40
1939	168,046	166,777	1269	0.76
1939/40	203,968	202,824	1144	0.56
<u>Air Figures</u>				
1935-36	1745	1613	132	8.18
1937	8475	8161	314	3.85
1938	11892	11206	686	6.12
1939	13710	13020	690	5.30
1939/40	14383	13824	558	4.04
Sources: 1937 Year Book, P845			Excesses in favour of North Island	
1938 Year Book, P67			have been calculated.	
1940 Year Book PP72,73				
1941 Year Book P47			See also G10	

TABLE 7

## RURAL/URBAN MOBILITY OF POPULATION

Year: 31.3	Total Urban Pop.	Total Rural Pop.	Total	% Urban Pop.	% Rural Pop.
1929	741320	729790	1471110	50.39	49.61
1930	753240	735963	1489203	50.58	49.42
1931	767900	743800	1511700	50.80	49.20
1932	775550	749995	1525545	50.85	49.16
1933	780950	757078	1538028	50.78	49.22
1934	786850	763275	1550125	50.76	49.24
1935	792500	768492	1560992	50.77	49.23
1936	775324	798603	1573927	49.26	50.74
1937	781900	805311	1587211	49.26	50.74
1938	791500	812979	1604479	49.33	50.67
1939	803500	821214	1624714	49.45	50.55
1940	810300	830601	1640901	49.38	50.62
Sources: Calculations upon figures included in					1936 Year Book, P63
					1937 Year Book, P847
					1938 Year Book, P72
					1939 Year Book, PP58,79
					1940 Year Book, P79
					1941 Year Book, PP39,50
See also Gs 11,12.					

TABLE 8

NUMBERS AND RATE OF MARRIAGES

Year	Number	Rate per 1000 population
1929	10967	7.80
1930	11075	7.78
1931	9817	6.81
1932	9896	6.81
1933	10510	7.18
1934	11256	7.64
1935	12187	8.23
1936	13808	9.25
1937	14364	9.55
1938	15328	10.09
1939	17115	11.12

Source: 1941 Year Book, F73  
See also G'17

TABLE 9

NUMBERS AND RATE OF BIRTHS

Year	Number	Rate per 1000 population
1929	26747	19.03
1930	26797	18.83
1931	26622	18.45
1932	24884	17.12
1933	24334	16.63
1934	24322	16.51
1935	23965	16.17
1936	24837	16.64
1937	26014	17.29
1938	27247	17.93
1939	28833	18.73

Source: 1941 Year Book, P 59  
See also G'15

TABLE 10

NUMBERS AND RATE OF DEATHS

Year	Number	Rate per 1000 population
1929	12314	8.76
1930	12119	8.57
1931	12047	8.35
1932	11683	8.04
1933	11701	7.99
1934	12527	8.50
1935	12217	8.25
1936	13056	8.75
1937	13658	9.08
1938	14754	9.71
1939	14158	9.20

Greater prevalence of  
pneumonia & epidemic  
of measles

Source: 1941 Year Book, P 83  
See also G 16



TABLE 11

EXCESS OF BIRTHS OVER DEATHS

Year	Excess of Births over Deaths
1931	14575
1932	13201
1933	12633
1934	11795
1935	-----
1936	11781
1937	12357
1938	12495
1939	14679

Sources: 1935 Year Book, P 44  
 1936 Year Book, P 47  
 1938 Year Book, P 54  
 1940 Year Book, P 60  
 1941 Year Book, P 36

See also G 14

TABLE 12

SUICIDE RATES

Year	Number of Suicides	Rates per 10,000 population
1930	193	1.35
1931	226	1.56
1932	240	1.65
1933	200	1.36
1934	181	1.23
1935	149	1.00
1936	149	1.00
1937	167	1.11
1938	188	1.25
1939	180	1.17

Sources: 1936 Year Book, P 113  
 1941 Year Book, P 99

See also G18

TABLES 13 AND 14 (COMBINED)

PENSION & SOCIAL SECURITY PAYMENTS & PENSION &  
 SOCIAL SECURITY PAYMENTS PER HEAD POPN.

Year ended 31.3.	Payments Per Year			
	Total		Per Head of Population	
	Amount	Index Nos.	Amount	Index Nos.
<u>Pensions</u>				
1931	2906049	100	£1.9375	100
1932	3088536	106	£2.03	105
1933	3031781	104	£1.983	102
1934	3149895	108	£2.0416	105
1935	3338354	115	£2.1569	111
1936	3659664	126	£2.3375	121
1937	4940428	170	£3.1292	162
1938	6312530	217	£3.9583	204
1939	6780344	233	£4.2083	217
<u>Pensions &amp; Social Security</u>				
1940	12288340	423	£7.5208	388

Source: Based on figures in 1941 Year Book P551, See also Gs 19 & 20  
 Index Nos. Have been calculated.

TABLE 15  
RECEIPTS & PAYMENTS OF CONSOLIDATED FUND.

Years ended 31.3	Receipts	Payments	Surplus of Deficit
1930	25349861	25200882	148979
1931	23068931	24708042	-1639111
1932	22719733	24860552	-2140819
1933	22568521	22528379	40142
1934	23492749	24202027	-709278
1935	26126094	24499595	1626499
1936	26172368	25890568	281800
1937	31147187	30675159	472029
1938	36059443	35248621	810822
1939	36582046	35772678	809368
1940	37974159	37654820	319339
Sources: 1940 Year Book, P 574 1942 Year Book, P 449 See also G21.			

TABLE 16  
PUBLIC WORKS RECEIPTS & PAYMENTS  
RECEIPTS - AMOUNTS

Years ended 31.3	Loan Money	Sales of Electricity	Other Receipts	Total
1930	3029550	607272	753936	4390748
1931	8820700	686443	275089	9782232
1932	4393550	648029	111237	5152816
1933	1019851	823644	195041	2038536
1934	1404565	880374	78836	2363775
1935	1647400	932680	420292	3000372
1936	2250000	986204	221921	3458125
1937	4980553	1136421	626066	6743040
1938	3974726	1384900	242876	5602502
1939	9622279	1602267	351641	11372555
1940	9622076	1777692	141094	11939238
<u>Percentages of Total</u>				
1930	69.00	13.83	17.17	100
1931	90.17	7.02	2.81	100
1932	85.26	12.58	0.16	100
1933	50.03	40.40	9.57	100
1934	59.42	37.24	3.34	100
1935	54.91	31.09	14.00	100
1936	65.06	28.43	6.41	100
1937	73.86	16.85	9.29	100
1938	70.95	24.72	4.33	100
1939	84.61	14.09	1.30	100
1940	80.59	14.89	4.52	100
<u>Vertical Index Numbers</u>				
1930	100	100	100	100
1931	291	113	36	223
1932	145	107	1	117
1933	33	136	26	46
1934	46	145	10	54
1935	54	154	56	68
1936	74	162	29	79
1937	164	187	83	154
1938	131	228	32	128
1939	318	264	47	259
1940	319	293	98	272

Sources: Based in figures in 1934 Year Book P420  
1939 Year Book P477  
1942 Year Book P452

Index Numbers and Percentages of Total have been calculated.  
See also Gs 22,23,24.

TABLE 16 (cont.)

PAYMENTS

Years Ended 31.3	Railways	Roads	Telegraph Extension	Development of water Power	Public Buildings	Lands, River Improvements Irrigation	Lands Settlement	Departmental & others	Total	Amortization of Debt	Interest	Other Items	Total
1930	2980743	2158055	594383	504235	771614	262009		234457	7505496	50374	481261	911477	8948608
1931	3015292	2233430	419756	1197797	924364	233526		207481	8221646	23783	505840	209297	8960566
1932	952388	1465237	249978	1241796	454803	117560		152713	4634475	17163	537304	134911	5323853
1933	160853	538448	99999	589061	90567	107003		188028	1773959	37876	571369	36021	2419225
1934	132111	359671	144160	570323	149392	152622	351594	126898	1986771	561170	561170	3935	2572415
1935	125600	371573	135933	555519	286968	188352	347977	85577	2097499	574350	574350	3121	2714210
1936	258012	444377	195380	529075	346879	136245	218367	138440	2266775	16670	560002	20196	2863643
1937	1019094	913720	232512	763775	654909	98699	204335	155857	4042901	1551479	530120	476591	6601091
1938	2412990	1126757	312261	1007966	1234548	238497	565492	222920	7121431		517456	8359	7647246
1939	3798083	1290838	575944	1337784	2086294	304782	839380	274491	10506596		540731	977324	11145029
1940	4165416	1124590	416778	1425718	1795220	591659	804518	199848	10523747		550683	142404	11216834

PERCENTAGES OF TOTAL

1930	33.31	24.12	6.64	5.63	8.62	2.93		2.62	83.87	0.56	5.38	10.19	100
1931	33.65	24.93	4.68	13.26	10.30	2.60		2.32	91.75	0.27	5.64	2.34	100
1932	17.89	27.52	4.70	23.33	8.54	2.21		2.87	87.06	0.32	10.09	2.53	100
1933	6.65	22.26	4.13	24.35	3.74	4.42		7.77	73.33	1.50	23.51	1.49	100
1934	5.14	13.98	5.60	22.17	5.81	5.93	13.67	4.93	77.23	0.80	21.82	0.15	100
1935	4.63	13.69	5.01	20.47	10.57	6.94	12.82	3.15	77.28	1.45	22.16	0.11	100
1936	9.00	15.52	6.82	18.48	12.11	4.76	7.63	4.83	79.15	0.58	19.56	0.71	100
1937	15.44	13.84	3.52	11.57	9.92	1.50	3.10	2.36	61.25	23.50	8.03	7.22	100
1938	31.56	14.13	4.08	13.18	16.14	3.12	7.39	2.92	93.12		6.77	0.11	100
1939	34.08	11.58	5.17	12.00	18.72	2.73	7.52	2.46	94.27		4.85	0.88	100
1940	37.14	10.03	3.72	12.71	16.00	5.27	7.17	1.78	93.82		4.91	1.27	100

INDEX NUMBERS

1930	100	100	100	100	100	100		100	100	100	100	100	100
1931	101	103	71	236	120	89		88	110	47	105	23	100
1932	32	68	42	246	59	45		65	62	34	112	15	59
1933	5	25	17	117	12	41		80	24	75	119	4	27
1934	4	17	24	113	19	58	100	54	20	41	117	0.4	29
1935	4	17	23	110	37	72	99	36	28	78	119	0.3	30
1936	8	21	33	105	45	52	62	59	30	33	116	2	32
1937	34	42	39	151	85	38	58	66	54	3080	110	52	74
1938	81	52	53	200	160	91	161	95	95		108	1	85
1939	127	60	97	265	270	116	238	117	140		112	11	125
1940	140	52	70	283	233	226	229	85	140		114	16	125

Sources: 1934 Year Book, PP 420-421  
1939 Year Book, PP 477-478  
1942 Year Book, P 453

Index Nos and Percentages of Total have been calculated

See also Gs 22,23,24.

TABLE 17

## PUBLIC WORKS AND LOCAL BODY EMPLOYMENT

Year ending 31.3.	Public Works							Local Bodies		
	Roads				Other Works		Total		No.	Index Nos.
	No.	Index Nos.	% of Total	No.	Index Nos.	% of Total	No.	Index Nos.		
1930	5380	100	49.51	5487	100	50.49	10867	100	19620	100
1931	6365	118	51.24	6057	110	48.76	12422	114	22303	114
1932	5255	98	55.69	4182	76	44.31	9437	87	41026	209
1933	3213	60	47.72	3520	64	52.28	6733	62	49883	257
1934	3968	74	46.24	4613	84	53.76	8581	79	51877	264
1935	4094	76	45.92	4821	88	54.08	8915	82	54947	234
1936	4159	77	42.60	5605	102	57.40	9764	90	39823	203
1937	9247	172	53.42	8064	147	46.58	17311	159	32057	163
1938	11371	211	57.38	8447	154	42.62	19818	182	25426	130
1939	12952	241	57.16	9708	177	42.84	22660	209	28983	148
1940	11000	205	50.91	10605	193	49.09	21605	199	28766	147

Sources: 1932, Year Book F740    1933 Year Book P614    1934 Year Book P605  
 1935 " " P627    1936 " " P654    1937 " " F718  
 1938 " " F812    1939 " " F750    1940 " " PF857,858  
 1941 " " PF764    1940 " " F719  
 765

Index Numbers and Percentages have been calculated    See also Gs 34 & 36

TABLE 18

## PUBLIC WORKS EMPLOYMENT BY MONTHS.

Month	1935		1936		1937		1938		1939	
	Index Nos.	Nos	Index Nos.	Nos.	Index Nos.	Nos.	Index Nos.	Nos.	Index Nos.	Nos.
Jan	100.00	11179	123.36	13791	172.71	19307	180.38	20165	204.17	22824
Feb	104.79	11715	133.66	14942	179.47	20063	184.68	20646	199.35	23068
Mar	108.48	12127	141.61	15831	179.83	20103	190.25	21268	206.35	23068
Apr	109.12	12199	143.36	16026	178.93	20003	190.93	21344	200.61	22426
May	109.24	12212	142.64	15946	176.15	19692	189.53	21188	195.23	21825
June	105.91	11840	139.11	15551	173.47	19392	192.80	21553	193.69	21653
July	103.49	11569	139.03	15542	170.10	19016	200	22358	190.25	21268
Aug	103.35	11553	142.271	15905	169.75	18976	207.61	23209	188.53	21076
Sept	103.41	11560	151.04	16885	170.69	19082	211.65	23661	206.82	23120
Oct.	107.94	12067	163.31	18257	173.60	19407	213.35	23851	207.90	23241
Nov.	118.38	13234	168.87	18878	178.51	19962	208.70	23331	198.86	22231
Dec.	124.07	13870	171.74	19198	180.74	20205	207.93	23245	194.29	21720

Sources: Based on figures from 1940 Year Book F857  
 1941 Year Book F764

Index numbers have been calculated  
 See also G35.

TABLE 19

ROADING EXPENDITURE

	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39
Expenditure on :-									
Maintenance on :-									
Main Highways	1326372	1202343	858577	919194	1268610	1632453	1314694	1482531	1952732
Urban Roads & Streets	581734	529104	453969	397371	392032	406775	424201	463533	453282
Other Roads	1130811	1009702	763648	708424	947057	1098366	1038204	1164972	1305723
Totals	3038917	2741149	2024989	2076194	2607699	3137594	2777099	311036	3711737
Construction on :-									
Main Highways	838477	540841	275676	261602	406562	624943	1622982	2565822	3331950
Urban Roads & Streets	1077380	1338677	1104047	1224214	944235	903918	938692	982008	1308173
Other Roads	1656395	1489127	1085672	1122145	1010182	1102730	1443185	1605648	2025818
Totals	3572252	3368645	2465395	2607961	2360979	2631591	4004859	5153478	6665941
Interest & Sinking Funds :-									
Main Highways	595845	635930	632846	622128	612129	605403	605925	642695	734507
Urban Roads & Streets	615530	640728	585900	642282	554400	580979	573423	580773	572439
Other Roads	1125027	1198786	1136070	1129482	1136515	1122408	1047394	1135116	1248346
Totals									
Main Totals	8947571	8585238	6845200	7078047	7271722	8077975	9008700	10623098	12932970

Sources : 1937 Year Book, P 269

1941 Year Book, P 292

1943 Year Book, P 218

See also G 37

TABLE 20  
STATE FORESTRY RECEIPTS & PAYMENTS

Years ended 31.3.	Receipts	Payments	Balance (all deficits)
1929-30	105637	427418	321781
1931	84715	393065	308350
1932	55558	275177	291619
1933	45195	212383	167188
1934	52709	116386	63677
1935	72900	116658	43758
1936	106978	135745	28767
1937	133790	238974	105184
1938	145268	297859	152591
1939	153737	422073	268336
1940	160638	573744	413106
Sources : 1935 Year Book, P 358 1936 Year Book, P 374 1941 Year Book, P 417			
See also G 38			

TABLE 21  
AREA PLANTED BY THE STATE FORESTRY SERVICE

Years ended 31.3.	Acres.
1928-29	60635
1929-30	56630
1931	53847
1932	40979
1933	16997
1934	30532
1935	12211
1936	12090
1937	6701
1938	1705
1939	2711
1939-40	6447
Sources : 1936 Year Book, P 374 1941 Year Book, P 417	
See also G 39	

TABLE 22  
POST & TELEGRAPH DEPARTMENT RECEIPTS AND PAYMENTS

Years ended 31.3.	Receipts	Payments	Surplus
1931	3707420	3304648	402772
1932	3715229	2794565	920664
1933	3293932	2688119	605813
1934	3200414	2648600	551814
1935	3342978	2844554	498424
1936	3550336	3141884	408452
1937	3886098	3622425	263673
1938	4302444	4045762	256482
1939	4687564	4529358	158206
1940	4793691	4445906	347785
Sources : The relevant sections of all the Year Books. 1932 - 1941 inclusive Surplus has been calculated.			
See also G 40.			

## POST & TELEGRAPH DEPARTMENT EMPLOYMENT

Source: The relevant sections of all the Year Books, 1932-41 inclusive  
Index Nos. have been calculated  
See also Q41.

TABLE 24  
THE ELECTRICITY INDUSTRY

Years ended 31.3.	No. of stations (including generating & distributing stations)	Persons engaged, of both sexes, except on construction		Salaries & wages paid except to employees engaged on construction		Consumers		No. of Units generated		No. of Units generated per head of mean population	
		Nos.	Index Nos.	£	Index Nos.	Nos.	Index Nos.	Nos(000)	Index Nos.	Nos.	Index Nos.
1929	96	2786	100	685694	100	266306	100	594908	100	FNA	FNA
1930	99	2804	100.65	693031	101.07	284235	106.73	709683	119.29	480	100
1931	100	3050	109.48	756845	110.38	300779	112.95	759827	127.72	507	105.62
1932	100	2726	97.85	666585	97.21	309726	116.31	787650	132.40	519	108.12
1933	100	2619	94.01	609311	88.86	323243	121.38	831697	139.80	544	113.33
1934	99	2803	100.61	641959	93.62	334792	125.72	857806	144.19	556	115.83
1935	98	2907	104.34	670553	97.79	342413	128.58	916302	154.02	590	122.91
1936	99	3010	108.04	734249	107.08	356048	133.70	1031699	173.42	660	137.50
1937	98	3252	116.73	826598	129.55	371096	139.35	1141958	191.95	723	150.62
1938	98	3427	123.01	929686	135.59	388719	145.97	1252562	310.54	786	163.75
1939	99	3739	134.21	1032043	150.51	407463	153.01	1413518	237.60	877	182.71
1940	100	3991	143.25	1120554	163.42	426505	160.16	1631332	274.21	999	208.12

Sources: Based on figures in 1932 Year Book, P778, 1933 Year Book, P642, 1935 Year Book, P647, 1938 Year Book, P853  
1941 Year Book, P896

Index Nos. have been calculated.

See also Gs 42,43,44,45.



TABLE 25  
ELECTRICITY INDUSTRY - CAPITAL OUTLAY

Years ended 31.3.	As at 31st March each year				Increase over previous Year			
	State	Electric Power Boards	Private & other	Total	State	Electric Power Boards	Private & other	Total
1929	6109937	12009891	4338035	22457863				
1930	8709527	12920150	4130932	25760609	2599590	910259	-207103	3302746
1931	9150517	13637177	4182306	26970000	440990	717027	+ 51374	1229391
1932	10149137	13847760	3143873	27140770	998620	210583	-1038433	170770
1933	10566152	14026320	2510218	27102690	517015	178560	-633655	- 3
1934	10584348	14226259	1941287	26751891	18196	19939	-568931	- 350796
1935	12900752	14657514	1603980	29162246	2316404	431255	-334307	+2410352
1936	13240360	14319420	1680491	29240271	339608	-338094	+76511	78025
1937	15661230	13097727	1592051	30351008	2420870	-1221693	- 88440	1110737
1938	16399112	13722236	1389650	31510948	737882	+ 624509	-202451	1159940
1939	17255484	14380081	1437755	33073320	856372	657845	+ 48155	1562372
1940	18238990	15038979	1399126	34677094	983506	658897	- 38629	1603774
<u>Percentages of Total</u>								
1929	27.21	53.48	19.31	100				
1930	33.81	50.15	16.04	100				
1931	33.93	50.56	15.51	100				
1932	37.39	51.02	11.59	100				
1933	38.98	51.75	9.27	100				
1934	39.56	53.18	7.26	100				
1935	44.24	50.26	5.50	100				
1936	45.28	48.97	5.75	100				
1937	51.60	43.15	5.25	100				
1938	52.04	43.55	4.41	100				
1939	52.17	43.48	4.35	100				
1940	52.60	43.37	4.03	100				
<u>Index Numbers</u>								
1929	100	100	100	100				
1930	142.55	107.58	95.23	114.70	100	100	-18.81	100
1931	149.77	113.55	96.41	120.09	16.96	78.77	+ 4.67	37.22
1932	166.11	115.30	72.47	120.85	38.41	23.13	-94.33	5.17
1933	172.94	116.79	57.87	120.68	16.04	19.62	-57.56	- 1.15
1934	173.23	118.45	44.75	119.12	0.7	21.97	-51.68	-10.62
1935	211.15	122.04	36.97	129.85	89.11	47.38	-30.64	+72.98
1936	216.70	119.28	38.74	130.20	13.06	-37.14	+ 6.95	2.36
1937	256.33	109.06	36.70	135.14	93.13	-134.22	8.03	33.63
1938	268.40	114.26	32.03	140.31	28.38	68.61	-18.39	35.12
1939	282.42	119.73	33.14	147.27	32.94	72.27	+ 4.37	47.31
1940	298.52	125.22	32.25	154.41	37.83	72.39	- 3.51	48.56

Sources: 1932 Year Book, F778  
1935 Year Book, F647  
1938 Year Book, F851,853  
1941 Year Book, F804,805,806

Index Numbers, Percentages of Total and Increases over previous year have been calculated, as have "Private & Other" figures.  
See also G46

TABLE 26  
ELECTRICITY INDUSTRY - REVENUE

Years ended 31.3.	Total Revenue each year				Increase in Revenue over previous year			
	State	Electric Power Boards	Private & other	Total	State	Electric Power Boards	Private & other	Total
1929	516127	1850453	1466402	3832982				
1930	681792	2092169	1534294	4308255	165665	241716	67892	475273
1931	685242	2223879	1537019	4446140	3450	131710	2725	137885
1932	680003	2203485	1478979	4362467	- 5239	- 20394	-58040	- 83673
1933	864746	2248663	1428126	4541535	+184743	+ 45178	-50853	+179068
1934	901383	2154188	1429712	4485283	36637	- 94475	+ 1586	- 56252
1935	940864	2252187	1447411	4640462	39481	+ 97999	17699	+155179
1936	1040649	2338221	1489290	4868160	99785	86034	41879	227698
1937	1217529	2411878	1509029	5138436	176880	73657	19739	270276
1938	1468699	2580724	1642518	5691941	251170	168846	133489	553505
1939	1697117	2846052	1769063	6312232	228418	265328	126545	620291
1940	1932264	3239260	1954528	7126052	235147	383208	185465	813820
<u>Percentages of Total</u>								
1929	13.47	48.28	38.25	100				
1930	15.23	48.56	35.61	100				
1931	15.41	50.02	34.57	100				
1932	15.59	50.51	33.90	100				
1933	19.04	49.51	31.45	100				
1934	20.10	49.03	31.87	100				
1935	20.28	48.53	31.19	100				
1936	21.30	48.03	30.59	100				
1937	23.69	46.94	29.37	100				
1938	25.30	45.34	28.86	100				
1939	26.89	45.09	28.02	100				
1940	27.72	45.46	27.42	100				
<u>Vertical Index Numbers</u>								
1929	100	100	100	100				
1930	132.10	113.06	104.63	112.40	100	100	100	100
1931	132.77	120.18	104.82	116.00	2.08	54.49	4.01	29.01
1932	131.75	119.08	100.86	113.81	- 3.16	- 8.44	- 85.49	- 17.61
1933	167.54	121.52	97.39	118.48	111.52	18.69	- 74.90	37.68
1934	174.64	116.41	97.50	117.02	22.12	- 39.09	2.34	11.84
1935	182.29	121.71	98.70	121.07	23.83	40.54	26.07	32.65
1936	201.63	126.36	101.56	127.01	60.23	35.59	61.68	47.91
1937	235.90	130.34	102.91	134.06	106.77	30.47	29.07	56.87
1938	285.51	139.46	112.01	148.50	151.61	69.85	196.62	116.46
1939	328.82	153.80	120.64	164.68	137.88	109.77	186.39	130.52
1940	374.38	175.05	133.29	185.91	141.94	158.54	273.17	171.24

Sources : 1932 Year Book, FP 763,778  
1935 Year Book, P 647  
1936 Year Book, P 672  
1938 Year Book, FP 852,853  
1941 Year Book, FP 804,805,806

Index Numbers, Percentages of Total, Increases in Revenue over previous year and "Private & other" revenue figures have all been calculated.  
See also G47.

TABLE 27  
ELECTRICITY INDUSTRY - EXPENDITURE

Years ended 31.3.	Total Expenditure			Increase in Total Expenditure over Previous year		
	Working Expenses	Capital Charges	Total	Working Expenses	Capital Charges	Total
1929	1814633	2036525	3851158			
1930	1874235	2363066	4237301	59602	326541	386143
1931	2094736	2346084	4440820	220501	- 16982	203519
1932	2035184	1943525	3978709	- 59552	-402559	-462111
1933	2024932	2152722	4177654	- 10252	+209197	+198945
1934	1917735	2008374	3926109	- 107197	-144348	-251545
1935	2051725	2075617	4127342	+ 133990	+ 67243	+201233
1936	2199814	2153631	4353445	148089	78014	226103
1937	2380097	2287192	4667289	180283	133561	313844
1938	2799966	2137923	4937889	419869	-149269	270600
1939	3242419	2550605	5793024	442453	+412682	855135
1940	3758396	2663661	6422057	415977	113056	629033
<u>Percentages of Total</u>						
1929	47.12	52.88	100			
1930	44.23	55.77	100			
1931	47.17	52.83	100			
1932	51.15	48.85	100			
1933	48.47	51.53	100			
1934	48.85	51.15	100			
1935	49.71	50.29	100			
1936	50.53	49.47	100			
1937	51.00	49.00	100			
1938	56.70	43.30	100			
1939	55.97	44.02	100			
1940	58.52	41.48	100			
<u>Index Numbers</u>						
1929	100	100	100			
1930	103.29	116.03	110.03	100	- 5.20	52.71
1931	115.44	115.20	115.31	369.96	- 123.28	- 11.97
1932	112.15	95.43	103.31	- 99.92	64.06	51.52
1933	111.15	105.71	108.48	- 17.20	- 44.21	- 65.14
1934	105.68	98.62	101.95	-179.86	20.59	52.11
1935	113.07	101.92	107.17	224.81	23.89	63.73
1936	121.23	105.75	113.04	248.46	40.90	81.28
1937	131.16	112.31	121.19	302.48	- 45.71	70.08
1938	154.30	104.98	128.22	704.46	126.38	221.45
1939	178.68	125.24	150.42	742.35	34.62	162.90
1940	207.12	130.79	166.76	865.71		

Sources: 1932 Year Book, P 778  
1935 Year Book, P 647  
1938 Year Book, P 853  
1941 Year Book, P 806

Index Numbers, Percentages of Total and Increase in total expenditure over previous year figures are calculated.

See also G 48

TABLE 28  
RAILWAYS: MILEAGE & LOAD

Years ended 31.3.	Length Open, Miles	Train Mileage	Passengers	Goods & Livestock Tons.
1930	3287	12022043	25380114	7788973
1931	3322	11281898	22783056	6957709
1932	3315	10168720	19151480	5824811
1933	3315	9829953	18366654	5490686
1934	3320	10163474	19047186	5642199
1935	3320	10626400	19654467	6023960
1936	3320	11050376	20358524	6188805
1937	3320	11868083	21235428	6813240
1938	3323	12777852	22441212	7516049
1939	3319	13072615	23265768	7539012
1940	3390	13366798	24454014	7673950

Sources: 1940 Year Book, P322  
1941 Year Book, P275  
See also G 49

TABLE 29  
RAILWAYS: OPERATING REVENUE & EXPENDITURE

Years ended 31.3.	Total Operating Revenue	Total Operating Expenditure	% of Operating Expenditure as Operating Revenue.
1930	7473993	6848026	91.62
1931	6781388	6406143	94.47
1932	5788965	5301653	91.56
1933	5339075	4833754	90.54
1934	5628835	4877146	86.65
1935	5908064	5138588	86.98
1936	6243519	5523193	88.46
1937	6903604	6338385	91.81
1938	7591825	7291785	96.05
1939	8005059	7663632	95.73
1940	8761637	7943120	90.66

Sources: 1940 Year Book, PP 321,322  
1941 Year Book, PP 274,275  
See also G 50

TABLE 30  
RAILWAYS: EMPLOYEES

Year ended 31.3.	Total Number of Employees.
1930	19410
1931	18840
1932	16114
1933	14696
1934	14971
1935	16048
1936	17073
1937	19115
1938	21954
1939	24342
1940	25710

Sources: 1935 Year Book, P 262  
1936 Year Book, P 253  
1941 Year Book, P 277

See also G 51.

TABLE 31

## RAILWAYS: TOTAL COST OF CONSTRUCTION.

Year ended 31.3.	Capital Cost.
1930	65526089
1931	68679025
1932	59055701
1933	59228894
1934	59337917
1935	59477143
1936	59611834
1937	60659783
1938	63189260
1939	67075908
1940	71087455

Sources: 1935 Year Book, P 255

1936 Year Book, P 246

1941 Year Book, P 270

See also G52.

TABLE 32

## SOME ITEMS OF STATE EXPENDITURE

Years ended 31.3.	Expenditure on Hospitals etc.		Expenditure on Education	
	Amount	Amount per Head of Population	Amount	Amount per Head of Popu- lation.
1930-31	1591515	21/3	4102000	54/9
1932	1275936	16/10	3410000	44/11
1933	1311468	17/2	2816000	36/10
1934	1313646	17/2	2741000	35/6
1935	1313845	16/11	2871000	36/11
1936	1369685	17/6	3257000	41/7
1937	1606537	20/5	3976000	50/4
1938-39	1903189	24/1	4619000	57/11
1938-39	2282408	28/4	5100000	63/4

Years ended 31.3.	Expenditure on Pensions Etc.		Expenditure on Defence	
	Amount	Amount per Head of Population	Amount	Amount per Head
1930-31	2906049	38/9	835448	11/2
1932	3088536	40/8	627763	8/3
1933	3031781	39/8	669921	8/9
1934	3149895	40/10	762108	9/11
1935	3338354	42/11	1003072	12/11
1936	3659664	46/9	1114370	14/3
1937	4940428	62/7	1192079	15/1
1938	6312530	79/2	1702078	21/4
1938-39	6780344	84/2	2468009	30/8

Sources: 1936 Year Book, P 137

1941 Year Book, PP 131, 146, 190, 551.

See also G 26

TABLE 33

TOTAL TAX

See also Gs 25,27.

Years ended 31.3.	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Land Tax	1140324	1506911	1145617	542128	498916	498978	492526	458873	1047877	1038043	1058499	1019084
Sales Tax					38253	1847333	2170503	2462602	3044612	3499131	3555696	3510130
Unemployment Tax			280829	1217451	4099662	4413221	4561594	3921975	4224965	5105019	5461202	(1)
Death Duties	1944513	1727439	1809735	1444298	1511695	1390742	2205394	1615479	1725135	1679599	1817713	1625865
Income Tax	3310877	3533764	4003606	4447814	3556775	2961243	3796477	4581328	6618716	9078763	9303495	10271352
Motor Vehicles Taxation	1243577	1510790	1840590	1814186	1680605	1703527	1910452	2124130	2503111	2939711	3059989	2997441
Customs Revenue	7954252	8897047	7605976	5904348	6131414	6485014	7423597	8161161	9499254	10758733	10650428	9946858
Other Tax	2238490	2295180	2191932	2035397	2386383	2170769	2177396	2150824	2500632	2769526	2857890	12934519
Total Tax	17832033	19471131	18878285	17405622	19703703	21470827	24737939	25476372	31164302	36767525	37764912	42305249
Total Tax per head of Population	12.2125	13.1792	12.6042	11.475	12.8875	13.9292	14.9292	16.275	19.7292	23.0625	23.4375	25.6
Percentages of Total												
Land Tax	100	132	100	48	44	44	43	40	92	91	93	89
Sales Tax					100	4829	5674	6438	7959	9147	9295	9176
Unemployment Tax			100	433	1460	1572	1624	1397	1504	1818	1945	
Death Duties	100	89	93	74	78	72	113	83	89	86	93	84
Income Tax	100	107	121	134	107	89	115	138	200	247	281	310
Motor Vehicles Taxation	100	122	148	146	135	137	154	171	201	228	246	241
Customs Revenue	100	112	96	74	77	82	93	103	119	135	134	125
Other Tax	100	103	98	94	107	97	97	96	112	124	128	578
Total Tax	100	109	106	98	110	120	139	143	175	206	135	237
Total Tax per head of popn.	100	108	103	94	106	114	130	133	162	189	192	210
Vertical Index Nos.												
Land Tax	6.39	7.74	6.07	3.11	2.53	2.32	1.99	1.80	3.36	2.82	2.80	2.40
Sales Tax					0.19	8.60	8.77	9.67	9.77	9.52	9.42	8.30
Unemployment Tax			1.49	6.99	20.82	20.56	18.44	15.39	13.55	13.89	14.46	
Death Duties	10.90	8.87	9.59	8.30	7.67	6.48	8.91	6.34	5.54	4.57	4.81	3.84
Income Tax	18.58	18.15	21.20	25.55	19.06	13.79	15.36	17.98	21.24	24.69	24.63	24.28
Motor Vehicles Taxation	6.97	7.76	9.75	10.43	8.53	7.93	7.73	8.34	8.03	7.72	8.10	7.09
Customs Revenue	44.62	45.69	40.28	33.93	31.13	30.20	30.02	32.04	30.48	29.26	28.20	23.50
Other Tax	12.54	11.79	11.62	11.69	11.07	10.12	8.78	8.44	8.03	7.53	7.58	30.59
Total Tax	100	100	100	100	100	100	100	100	100	100	100	100

Source: The Year Books, Index Nos. and Percentages of the Total have been calculated.

TABLE 34  
GROSS INDEBTEDNESS

as at 31.3.	Amount £	Per head of Popn. £
1928	251,396,252	172.18. 5.
1929	264,191,983	179.11. 9.
1930	267,383,343	179.11. 0.
1931	276,033,358	182.12. 0.
1932	281,942,800	184.16. 3.
1933	282,622,958	183.15. 2.
1934	+ 302,791,996	195. 6. 8.
1935	280,581,217	179.14. 11.
1936	282,561,098	179.10. 6.
1937	287,670,200	181. 4. 10.
1938	290,201,342	180.17. 5.
1939	303,970,272	187. 1. 10.
1940	322,907,536	196.15. 9.

+ = Increase mainly floating debt, paid off in 34-35.  
Source: 1941 Year Book P 519  
See also G 28.

TABLE 35  
NEW NATIONAL DEBT.

Year ended 31.3.	Public Works	Electric Supply	Main Highways	Housing Amount £	State Advances	Other New Debt.	Total New Debt.	Redeemed Debt.	Net New Debt.
1929	7488564	2025353	230000		3067910	3218028	16029855	3234124	12795731
1930	1057629	231556	499625		2144075	1787335	5720220	2528860	3191360
1931	5774193	802566	549975		1500025	2496941	11123700	2473685	8650015
1932	3028750	1000000	380000			388550	4797300	1917858	2879442
1933	646661	500000				611000	1757661	2012840	- 255179
1934	1066065	596625	203000			764254	2629944	1352550	1277394
1935	1506000	141400	431500			1220660	3299560	2653358	646202
1936	2400000					1436591	3836591	1856710	1979881
1937	4440053	1670569		100000		2291798	8502420	3393318	5109102
1938	5851526			1600000		3371	7454897	1886805	5568092
1939	9622279	180000	2675600	4000000		271107	16748986	2980056	13768930
1940	9365821	839238	2607889	5100000		3703017	21615965	2678701	18937264
<u>Index Numbers.</u>									
1929	100.00	100.00	100.00		100.00	100.00	100.00	100.00	100.00
1930	14.12	11.43	217.23		69.89	55.54	35.68	78.19	24.94
1931	77.12	39.63	239.12		48.89	77.59	69.39	76.49	67.60
1932	40.44	49.37	165.22			12.07	29.93	59.30	22.50
1933	8.64	24.69				18.99	10.96	62.24	- 1.99
1934	14.24	29.46	88.26			23.75	16.41	41.82	9.98
1935	20.11	6.98	187.61			37.93	20.58	82.04	5.05
1936	32.05					44.64	23.93	57.41	15.47
1937	59.29	82.48		100.00		71.22	53.04	104.92	39.93
1938	78.14	8.		1600.00		0.10	46.51	58.34	43.52
1939	128.49	8.89	1163.30	4000.00		8.42	104.49	92.14	107.61
1940	125.07	41.44	1133.86	5100.00		115.07	134.85	82.83	148.00
<u>Percentage of Total</u>									
1929	46.72	12.63	1.43		19.14	20.08	100.00	20.18	79.82
1930	18.49	4.05	8.73		37.48	31.25	100.00	44.21	55.79
1931	51.91	7.21	4.94		13.48	22.46	100.00	22.24	77.76
1932	63.13	20.84	7.92			8.11	100.00	39.98	60.02
1933	36.79	28.45				34.76	100.00	114.52	-14.52
1934	40.54	22.68	7.72			29.06	100.00	51.43	48.57
1935	45.64	4.29	13.08			36.99	100.00	80.42	19.58
1936	62.55					37.45	100.00	48.39	51.61
1937	52.22	19.65		1.18		26.95	100.00	39.91	60.09
1938	78.49			21.47		0.04	100.00	25.31	74.69
1939	57.45	1.07	15.98	23.88		1.62	100.00	17.79	82.21
1940	43.33	3.88	12.06	23.59		17.14	100.00	12.39	87.61

Sources: 1930 Year Book, P641 ; 1931 Year Book, PP606,7 ; 1934 Year Book, P689 ;  
1935 Year Book, PP437,38 ; 1936 Year Book, P459 ;  
1937 Year Book, P492 ; 1938 Year Book, P572 ; 1940 Year Book ;  
1941 Year Book, P52

Index Nos. and Percentages calculated  
See also G29.

TABLE 36

LOCAL GOVERNMENT RECEIPTS.

Year ended 31.3.	Revenue From			Total Reve- nue	Receipts not Revenue	Total Receipts
	rates	Public Utilities Licenses, Rents.	Govt.			
1929	5844495	9190655	332921	15428071	6042007	21470078
1930	6010987	10309785	436946	16757718	5495427	22253145
1931	5637254	10201076	426315	16264645	4432956	20697601
1932	5511818	9054187	628064	15194069	4374251	19568320
1933	5237688	8462628	450657	14150973	4433294	18584267
1934	5541255	8245173	443239	14229667	3821779	18051446
1935	5511442	8608064	559223	14678729	3943488	18622217
1936	5585855	8976035	576513	15138403	4348534	19486937
1937	5884353	9524939	454498	15973790	4252803	20226593
1938	6541354	10542197	463096	17546647	4389620	21936267
1939	6971550	11275084	475542	18722176	6254792	24976968
1940	7289240	12188955	480573	19958768	6772327	26731095
<u>Index Numbers</u>						
1929	100	100	100	100	100	100
1930	102.85	112.18	111.20	108.62	90.95	103.65
1931	96.45	110.99	108.50	105.42	73.37	96.40
1932	94.31	98.51	159.84	98.48	72.39	91.14
1933	89.62	92.08	114.69	91.72	73.37	86.56
1934	94.81	89.71	112.80	92.23	63.25	84.08
1935	94.30	93.66	142.30	95.14	65.26	86.73
1936	95.57	97.66	146.72	98.12	71.97	90.76
1937	102.56	103.64	115.67	103.54	70.38	94.21
1938	111.92	114.71	117.86	113.73	72.65	102.17
1939	119.28	122.68	121.03	121.35	103.52	116.33
1940	124.72	132.62	122.31	129.36	112.08	124.50
<u>Percentage of Total</u>						
1929	27.22	42.81	1.83	71.86	28.14	100
1930	27.01	46.33	1.96	75.30	24.70	100
1931	27.24	49.23	2.06	78.58	21.42	100
1932	28.17	46.27	3.21	77.63	22.35	100
1933	28.18	45.53	2.42	76.14	23.86	100
1934	30.70	45.68	2.45	78.83	21.17	100
1935	29.60	46.22	3.00	78.82	21.18	100
1936	28.66	46.06	2.96	77.68	22.31	100
1937	29.63	47.09	2.25	78.97	21.03	100
1938	29.82	48.06	2.11	79.99	20.01	100
1939	27.92	45.14	1.90	74.96	25.04	100
1940	27.26	45.60	1.80	74.66	25.33	100

Sources: 1940 Year Book, P 659  
1942 Year Book, P 526

Index Numbers and Percentages of Total have been calculated.  
See also G32.



TABLE 37

## LOCAL GOVERNMENT PAYMENTS

Years ended 31.3.	Public Works Construction & Maintenance	Hospital Board Levies	Administration	Other	Total Expenditure
1929	13298839	677085	964098	2718453	21300024
1930	14486488	685134	1053613	1940221	22061088
1931	14402327	699584	1029017	2022363	22174524
1932	12694508	561905	989366	1878268	20087381
1933	11584311	574960	907659	1940903	18885173
1934	10754446	592092	879276	2035211	17737792
1935	11656773	601448	875317	2249340	19844891
1936	12250661	622512	998998	2221685	19338242
1937	13164376	717084	1001504	2219099	20222715
1938	14672484	821697	1034646	2490527	22051147
1939	17170464	943529	1354249	2580703	25078935
1940	17413242	1093479	1350011	2817710	25709195
<u>Index Numbers</u>					
1929	100	100	100	100	100
1930	108.93	101.19	108.28	71.37	103.57
1931	108.30	103.32	106.73	74.39	104.10
1932	95.46	82.99	102.62	69.09	94.31
1933	87.12	84.92	94.15	71.40	88.65
1934	80.87	87.45	91.26	74.87	83.28
1935	87.65	88.83	90.79	82.74	88.00
1936	92.12	91.94	103.62	81.73	90.78
1937	98.99	105.91	103.88	81.63	94.94
1938	110.33	121.36	107.32	91.62	103.53
1939	129.11	139.35	140.47	94.93	117.74
1940	103.94	161.50	140.03	103.65	120.70
<u>Percentages of Total</u>					
1929	62.44	3.18	4.53	12.76	100
1930	65.66	3.11	4.78	8.79	100
1931	64.96	3.15	4.64	9.12	100
1932	63.20	2.80	4.92	9.35	100
1933	61.34	3.04	4.81	10.28	100
1934	60.63	3.34	4.96	11.47	100
1935	62.18	3.21	4.67	12.00	100
1936	63.35	3.22	5.17	11.49	100
1937	65.10	3.55	4.98	10.97	100
1938	66.54	3.73	4.69	11.29	100
1939	68.47	3.76	5.40	10.29	100
1940	67.73	4.26	5.25	10.96	110

Sources: 1940 Year Book P 662  
1942 Year Book, P 528

Index Numbers and Percentages of Total have been calculated.  
See also G33.

TABLE 38  
LOCAL GOVERNMENT DEBT.

Years ended 31.3.	Gross Debt (almost all Debentures & similar securities)	Nett Debt i.e. Gross Debt less accumulated sinking funds.	Gross debt rate per head. £	Annual Loan Charge	
				Amount	Per Head. £
1929	69294619	60072123	47. 2. 1.	4479180	3. 0. 11.
1930	71207539	61595740	47. 16. 4.	4682181	3. 2. 11.
1931	72686036	62166199	48. 1. 8.	4828793	3. 3. 11.
1932	72402282	61554906	47. 9. 2.	4905467	3. 4. 8.
1933	72476056	60902632	47. 2. 5.	4919221	3. 4. 0.
1934	71969387	59854736	46. 8. 7.	4449777	2. 17. 8.
1935	71245458	59551850	45. 12. 10.	4421506	2. 16. 8.
1936	70400176	59238117	44. 14. 8.	4395758	2. 15. 10.
1937	68559750	57920884	43. 3. 11.	4446706	2. 16. 0.
1938	68060951	57404727	42. 8. 5.	4457874	2. 15. 7.
1939	68206674	57349522	41. 19. 7.	4602062	2. 16. 7.
1940	69486970	59356358	42. 6. 11.	4726074	2. 17. 7.
<u>Index Numbers.</u>					
1929	100	100	100	100	100.00
1930	102.76	102.53	101.51	104.53	102.38
1931	104.89	103.48	102.08	107.81	104.92
1932	104.48	102.46	100.75	109.52	106.05
1933	104.59	101.38	100. 04	109.82	105.06
1934	103.86	99.63	98.57	99.34	96.20
1935	102.81	99.13	96.39	98.71	92.91
1936	101.59	98.68	94.96	98.14	91.66
1937	98.94	96.42	91.70	99.27	91.93
1938	98.22	95.56	90.06	99.52	91.25
1939	98.43	95.46	89.14	102.74	92.89
1940	100.28	97.14	89.90	105.51	94.53
<u>Percentages of Total</u>					
1929	100	86.69		6.46	
1930	100	86.50		6.58	
1931	100	85.52		6.64	
1932	100	85.01		6.77	
1933	100	84.03		6.79	
1934	100	83.16		6.18	
1935	100	83.58		6.21	
1936	100	84.14		6.24	
1937	100	84.48		6.49	
1938	100	84.34		6.55	
1939	100	84.08		6.75	
1940	100	83.98		6.80	

Sources: 1940 Year Book, PP 665.66  
1942 Year Book, P 532.

Index Numbers and Percentages of Total have been calculated.  
See also G 30 & 31.

TABLE 39

## QUANTITY OF MONEY IN CIRCULATION

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Year	Nett note circula- tion.	Trading Banks N.Z. Demand liabilities	Reserve Bank demand and liabilities (not to Trading Banks)	Total	
				Amount	Index Nos.
31.12.34	6834281	24178000	6698986		100
24.6.35	6104527	25922000	13310437		120.22
30.12.35	7615273	27168000	4058204		103.00
29.6.36	7221851	30806000	9098042		124.96
28.12.36	10443224	31080000	3876066		120.39
28.6.37	8658793	36053000	8356032		140.72
27.12.37	11679389	33575000	3984947		130.57
27.6.38	9524714	35062000	4962360		131.39
26.12.38	13069761	34172000	2921269		133.02
26.6.39	11531795	37276000	2479007		136.00
25.12.39	15626495	41340000	2888264		158.72
<u>Percentages of Total</u>					
31.12.34	18.12	64.11	17.77		
24.6.35	13.46	57.18	29.36		
30.12.35	19.61	69.94	10.45		
29.6.36	15.32	65.37	19.31		
28.12.36	23.00	68.46	8.54		
28.6.37	16.32	67.93	15.75		
27.12.37	23.72	68.18	8.10		
27.6.38	19.22	70.76	10.02		
26.12.38	26.05	68.12	5.83		
26.6.39	22.49	72.68	4.83		
25.12.39	26.11	69.07	4.82		

Sources adapted from figures given in

1941 Year Book, P 598 1942 Year Book, PP545 543

1938 Year Book, P 643

Index Numbers and Percentages of Total Calculated.

See also G65

TABLE 40

## VOLUME OF BANKING BUSINESS

Years	Debits other than Govt. debits		Govt. Debits		Total Debits		Cleanings	
	£m	Index Nos.	£m	Index Nos.	£m	Index Nos.	£m	Index Nos.
1929	881	100	262	100	1143	100	529	100
1930	792	90	272	104	1064	93	473	89
1931	593	67	224	86	835	73	343	65
1932	542	62	206	79	748	65	307	58
1933	559	63	248	95	807	71	352	67
1934	676	77	280	107	956	84	430	81
1935	687	78	73	28	760	66	365	69
1936	817	93	83	32	900	79	437	83
1937	974	111	96	37	1070	94	518	98
1938	934	106	104	40	1038	90	499	94
1939	958	109	108	41	1066	93	507	96

Sources: 1940 Year Book, P 688

1941 Year Book, P 596

Index Nos. calculated.

See also G 64

TABLE 41  
S.A.C. NEW BUSINESS.

Years ended 31st March	1937		1938		1939		1940	
	No. of Loans	Value	No. of Loans	Value	No. of Loans	Value	No. of Loans	Value
Refinance	2409	2980844	1431	1554310	1132	1122882	11	15634
Other purposes	1610	615032	759	625682	1457	1075234	483	312603
Erection of Dwellings	1120	789990	997	824554	2123	2062275	1617	1540130
Total	4139	4385866	3187	3004546	4712	4260391	2111	1868368
Rate of Loans		4 $\frac{1}{8}$ %		4 $\frac{1}{8}$ %		4 $\frac{1}{8}$ %		4 $\frac{1}{8}$ %

Sources: 1939 Year Book, P 513  
1941 Year Book, P 534  
See also G 85.

TABLE 42  
DISCOUNT RATE

Till	29.7.35	4%
From	29.7.35	3 $\frac{1}{2}$ %
"	2.3.36	2 $\frac{1}{2}$ %
"	29.6.36	2%
"	19.11.38	4%
"	6.9.39	3%
"	27.5.40	2%

Sources: 1941 Year Book P 605

TABLE 43  
TRADING BANK OVERDRAFT AND DISCOUNT RATES

Till	1.11.31	7%
From	1.11.31	6 $\frac{1}{2}$ %
"	1.9.32	6%
"	1.5.33	5%
"	30.11.34	4 $\frac{1}{2}$ %

TRADING BANK FIXED DEPOSIT RATES OF INTEREST

Operative Date	3 months & under 6 months	6 months & under 1 year	1 year & under 2 years	2 years & over
9.7.28	3 $\frac{3}{4}$ %	3 $\frac{3}{4}$ %	4%	4 $\frac{1}{2}$ %
1.2.30	3 $\frac{3}{4}$ %	3 $\frac{3}{4}$ %	4 $\frac{1}{2}$ %	5%
22.4.30	3 $\frac{3}{4}$ %	4%	4 $\frac{1}{2}$ %	5%
1.8.31	3 $\frac{1}{2}$ %	3 $\frac{3}{4}$ %	4%	4 $\frac{1}{2}$ %
1.6.32	3%	3 $\frac{1}{4}$ %	3 $\frac{1}{2}$ %	4%
2.12.32	2 $\frac{1}{2}$ %	2 $\frac{3}{4}$ %	3%	3 $\frac{3}{4}$ %
11.7.33	2%	2 $\frac{1}{2}$ %	2 $\frac{3}{4}$ %	3%
5.7.34	1 $\frac{1}{2}$ %	2%	2 $\frac{1}{2}$ %	2 $\frac{3}{4}$ %
2.11.34	1 $\frac{1}{4}$ %	1 $\frac{3}{4}$ %	2 $\frac{1}{4}$ %	2 $\frac{1}{2}$ %

Source : 1941 Year Book, P 605.

**TABLE 44**  
**LIABILITIES OF TRADING BANKS**

Date	Notes in circulation	Demand Liabilities			Time Liabilities			Total N.Z. Liabilities	Total Foreign Liabilities	Total Liabilities
		In N.Z.	Outside N.Z.	Total Demand Liabilities	In N.Z.	Outside N.Z.	Total Demand Liabilities			
Dec. 31.34	1486	24178	260	24438	26762	846	37608	60930	1106	63532
Jun. 24.35	710	25922	379	27709	35827	906	36733	61749	1285	63744
Dec. 30.35	585	27168	541	26301	37136	552	37688	64304	1093	65982
Jun. 29.36	518	30806	605	31411	36067	777	36844	66873	1382	68773
Dec. 28.36		31080	783	31863	33124	953	34077	64304	1736	65940
June 28.37		36053	1255	37308	32948	533	33481	69001	1788	70789
Dec. 27.37		33575	1787	35362	32092	388	32480	65667	2175	67842
June 27.38		35062	1516	36578	31108	331	31439	66170	1847	68017
Dec. 26.38		34172	2164	36336	29798	687	30485	63970	2851	66821
June 26.39		37276	2307	39583	29426	285	29711	667020	2592	69294
Dec. 25.39		41340	2351	43691	31866	421	32287	73206	2772	75978
<u>Index Numbers</u>										
Dec. 31.34	100	100	100	100	100	100	100	100	100	94.14
June 24.35	47.78	107.21	145.77	107.62	97.45	107.09	97.67	100.33	116.18	94.46
Dec. 30.35	39.37	112.37	208.08	113.39	101.01	65.25	100.21	103.86	98.82	97.77
June 29.36	34.86	127.41	232.70	128.53	98.10	91.84	97.97	108.25	124.95	101.91
Dec. 28.36		128.55	301.16	130.38	90.10	112.64	90.61	103.79	156.96	97.71
June 28.37		149.12	482.70	152.66	89.62	63.00	89.03	111.42	161.66	104.90
Dec. 27.37		138.87	687.32	144.70	87.29	45.86	86.36	106.78	196.65	100.53
June 27.38		145.02	583.08	149.68	84.61	39.12	83.60	107.06	167.00	100.79
Dec. 26.38		141.34	832.32	148.69	81.05	81.20	81.06	105.18	257.78	99.62
June 26.39		154.17	887.32	161.97	80.04	33.69	79.00	109.07	234.36	102.68
Dec. 25.39		170.98	904.24	178.78	86.68	49.76	85.85	119.59	250.63	112.58
<u>Percentages of Total</u>										
Dec. 31.34	2.34	38.06	0.41	38.47	57.86	1.33	59.19		1.74	100
June 24.35	1.11	40.67	0.59	41.26	56.21	1.42	57.63		2.02	100
Dec. 30.35	0.89	41.18	0.82	42.00	56.28	0.83	52.12		1.66	100
June 29.36	0.75	44.80	0.88	45.67	52.44	1.13	53.57		2.01	100
Dec. 28.36		47.13	1.19	48.32	50.23	1.45	51.68		2.63	100
June 28.37		50.93	1.77	52.12	46.54	0.76	47.30		2.53	100
Dec. 27.37		49.49	2.63	52.12	47.30	0.58	47.88		3.21	100
June 27.38		51.55	2.23	53.78	45.73	0.49	46.22		2.72	100
Dec. 26.38		51.14	3.24	54.38	44.59	1.03	45.62		4.27	100
June 26.39		53.79	3.33	57.12	42.47	0.41	42.88		3.74	100
Dec. 25.39		54.41	3.09	57.51	41.95	0.55	42.50		3.65	100

Sources: 1938 Year Book, P 643  
1942 Year Book, P 545  
Index Numbers and Percentages of Total have been calculated.  
See also Gs 57, 58, 59, 60, 61.

TABLE 45  
ASSETS OF TRADING BANKS.

Date	Coin & Bullion	Reserve Bank Notes	Balances held @ Reserve Bank	Overseas Assets	Securities Held	Advances and Discounts	Land & Buildings etc.	Total Assets.
	Y.B. 1938, P. 644			Amount. £ (000)				
31/12/34	615	4417	9072	1542		44903		78549
24/6/35	798	3714	3877	24497		45172		78058
30/12/35	745	3691	3676	15783	5057	46467	1490	83009
29/6/36	733	3337	6686	23217	5622	45077	1537	86209
28/12/36	526	3198	11040	13282	5997	48282	1541	83866
28/6/37	761	3972	9818	11202	7788	47711	1679	88931
	Y.B. 1942, P. 546							
27/12/37	685	3554	8924	8838	8041	54002	1779	85823
27/6/38	891	4250	6859	11363	6995	54886	1818	87062
26/12/38	645	3572	7189	4999	9033	57797	1837	85072
26/6/39	753	3936	9624	6136	10872	55090	1872	88283
25/12/39	591	3666	13537	9681	15461	51138	1835	96109
	Y.B. 1938, P. 644			Index Numbers.				
31/12/34	100	100	100	100		100		123.74
24/6/35	129.75	84.08	42.74	125.36		100.60		122.96
30/12/35	121.14	83.56	106.66	80.76		103.70	100	130.76
29/6/36	119.19	75.55	73.70	118.81	100	100.39	103.15	135.81
28/12/36	85.53	72.40	121.69	67.97	111.18	107.52	103.42	132.11
28/6/37	123.74	89.93	108.22	88.03	118.59	106.25	112.68	140.09
	Y.B. 1942, P. 546							
27/12/37	111.38	80.46	98.37	45.23	159.01	120.26	119.40	135.20
27/6/38	144.88	96.22	75.61	58.15	138.33	122.23	122.01	137.15
26/12/38	104.88	80.87	79.24	25.58	178.63	128.71	123.29	134.01
26/6/39	122.44	89.11	106.09	31.40	214.99	122.69	125.64	139.07
25/12/39	96.10	83.00	149.22	50.56	305.74	143.88	123.15	151.40
	Y.B. 1938, P. 644			Percentages of Total.				
31/12/34	0.78	5.62	11.55	24.88		57.17		100
24/6/35	1.02	4.76	4.97	31.38		57.87		100
30/12/35	0.00	4.44	11.66	19.01		56.10	1.80	100
29/6/36	0.85	3.87	7.76	26.93	6.09	52.29	1.78	100
28/12/36	0.63	3.81	13.16	15.84	7.15	57.57	1.84	100
28/6/37	0.86	4.47	11.04	19.34	8.76	53.64	1.89	100
	Y.B. 1942, P. 546							
27/12/37	0.80	4.14	10.40	10.30	9.37	62.92	2.07	100
27/6/38	1.02	4.88	7.88	13.05	8.04	63.04	2.09	100
26/12/38	0.76	4.20	8.45	5.88	10.62	67.93	2.16	100
26/6/39	0.85	4.46	10.90	6.95	12.32	82.40	2.12	100
25/12/39	0.66	3.81	14.09	19.28	16.09	53.21	1.91	100

Sources: 1938 Year Book, P. 644  
1942 Year Book, P. 546

Index Nos. and Percentages of Total have been calculated.

See Also G62.

TABLE 45. Continued  
AN ANALYSIS OF ADVANCES.

	Date			
Advances to:-	June, 1936 £(000)	June, 1937 £(000)	June, 1938 £(000)	June, 1939 £(000)
Farmers:-				
Mainly dairy:	4988	5101	5445	5380
" wool	5907	5368	6255	6288
" Meat	2199	1925	2151	2206
" Agriculture	297	322	340	372
Mixed Farming	4295	4058	4627	4438
Inds. Allied to Primary Production:-				
Dairy Cos., Factories etc.	1199	1279	1308	1505
Freezing Works, Meat Cos. etc.	865	852	1707	2846
Woollen Mills	276	386	603	447
Other	1552	1652	2013	1661
Other Manuf. & Prod.				
Inds.	3116	3856	4587	4641
Merchants, Wholesalers:-				
Mainly Importers	3239	3084	3804	3282
Others	1050	1303	1030	1352
Retailers	2790	3505	3767	3638
Transport:-				
Shipping	34	48	63	79
Other	479	534	644	627
Local & Municipal authorities				
public utility concerns	929	845	1262	1544
Stock & Station Agents	726	688	1232	1331
Hotels (Public & Private)				
Restaurants etc.	786	860	1199	1106
Financial Cos. Socs. etc.	1417	1685	2353	2296
Professional	1204	1450	1434	1503
Private Individuals	4355	5156	5544	5029
Other	3080	3219	2936	2857
Total Advances.	44785	47175	54305	54422
	Index Numbers.			
Farmers:-				
Mainly dairy:	100	102.26	109.16	107.86
" wool	100	90.87	105.89	106.45
" Meat	100	87.54	97.82	100.32
" Agriculture	100	108.42	114.48	125.25
Mixed Farming	100	94.48		107.73
Inds. Allied to Primary Production:-				
Dairy Cos. Factories etc.	100	106.67	109.09	125.52
Freezing Wks. Meat Cos. etc.	100	98.50	197.35	320.03
Woollen Mills	100	139.86	218.48	161.96
Other	100	106.44	129.70	107.02
Other Manuf. & Prod. Inds.				
Merchants, Wholesalers:-				
Mainly Importers	100	95.22	117.44	101.33
Others	100	124.10	98.10	128.76
Retailers	100	125.63	135.02	130.39
Transport:-				
Shipping	100	141.18	185.30	232.35
Other	100	111.48	134.45	130.90
Local & Municipal authorities,				
public utility concerns	100	90.96	135.84	166.25
Stock & Station Agents	100	94.77	169.70	183.33
Hotels (Public & Private)				
Restaurants etc.	100	109.42	152.55	140.72
Financial Cos., Socs. etc.	100	118.91	166.06	162.03
Professional	100	120.43	119.10	124.83
Private Individuals	100	118.39	127.30	115.48
Other	100	104.51	95.33	92.57
Total Advances	100	105.34	121.26	121.52

Source: 1940 Year Book, P. 688.  
Index Nos. have been calculated.

**TABLE 46**  
**ASSETS AND LIABILITIES OF RESERVE BANK.**

Date.	Assets.				Subsidiary Coin.	Advances.		Investments.	Other Assets.	Total Assets.	Reserve Bank's Net Reserve Ratio. (1)
	Gold.	Reserves.		Primary Products Marketing.		Other.					
		Foreign Currencies.	Total Exchange.								
						Amount. £.					
27/8/34	3202179	24487093	27689272	108046	-	-	1500000	18000	29315318	99.65%	
31/12/34	3001731	22092021	25093752	93700	-	-	1872111	23319	27082882	98.24	
24/6/35	2801732	22813024	25614756	145975	-	-	2094075	35874	27890680	97.25	
30/12/35	2801733	21398949	24200682	195812	-	-	1639181	35905	26071580	98.95	
29/6/36	2801733	22122319	24924052	192158	-	-	2036800	272896	27425906	96.50	
28/12/36	2801790	16534425	19336215	110903	6059572	1800000	2700315	100776	30107781	67.91	
28/6/37	2801791	21542637	24344428	117273	4754993	200000	2906450	75922	32399066	79.01	
27/12/37	2801791	16992748	19794539	209661	*6180312	900000	2658325	74195	29817032	70.32	
27/6/38	2801791	16609197	19410988	235371	4156650	600000	2732065	69546	27204620	75.82	
26/12/38	2801791	4678233	7480024	188666	5257018	11200000	3605022	750969	2841699	27.88	
26/6/39	2801839	5600682	8402531	226756	6301165	10625000	3768164	187982	29511598	30.25	
25/12/39	2801839	8717735	11519574	155433	3381001	19275000	334230	334230	38023305	32.20	

**LIABILITIES.**

Date.	Capital & General Reserve Fund.	Bank Notes.	Other Demand Liabilities.			Other Liabilities.	Total Liabilities.
			State.	Banks.	Other.		
Amount.							
Aug. 27/34	1500000	7975310	3298174	16510566	1294	29974	29315318
Dec. 31/34	1500000	9772279	2693087	9071699	5899	39918	27082882
June 24/35	1500000	9111270	13287926	3915165	22511	53808	27890680
Dec. 30/35	1500000	10720555	3696061	9678905	362143	113916	26071580
June 29/36	1500000	10040705	8839632	6697464	258410	89695	27425906
Dec. 28/36	1500000	13641451	3539668	11056206	236398	134058	30107781
June 28/37	1500000	12630838	7361047	9824090	994985	88106	32399066
Dec. 27/37	1500000	15233127	3486746	8929644	498201	169314	29817032
June 27/38	1500000	13774724	4648209	6862841	314151	104695	27204620
Dec. 26/38	1500000	16641426	2842163	7193227	79106	225777	28416999
June 26/39	1500000	15467281	2328009	9643785	150998	421525	29511598
Dec. 25/39	1500000	19292125	2859912	13545448	28352	797468	38023305
Index Numbers.							
Aug. 17/34		100	100	100	100	100	100
Dec. 31/34		122.53	202.93	54.94	455.87	133.17	92.38
June 24/35		114.24	402.89	23.71	1739.65	179.50	95.14
Dec. 30/35		134.42	112.06	58.62	27986.41	380.02	88.93
June 29/36		124.90	268.02	40.56	19969.92	299.22	93.55
Dec. 28/36		171.04	107.32	66.96	18268.84	447.22	102.70
June 28/37		158.37	223.19	59.50	76892.44	293.92	110.52
Dec. 27/37		191.00	105.72	54.08	38500.97	564.83	101.71
June 27/38		172.72	140.93	41.57	24277.59	349.26	92.80
Dec. 26/38		208.66	86.17	43.57	6113.31	753.19	97.15
June 26/39		193.94	70.58	58.41	11669.13	1406.21	100.67
Dec. 25/39		241.90	86.71	82.04	3191.04	2660.35	129.70
Percentages of Total.							
Aug. 27/34	5.12	27.20	11.25	56.32	0.01	0.10	100
Dec. 31/34	5.54	36.08	24.71	33.50	0.02	0.15	100
June 24/35	5.38	32.67	47.64	14.04	0.08	0.19	100
Dec. 30/35	5.75	41.12	14.18	37.12	1.39	0.44	100
June 29/36	5.47	36.61	32.23	24.42	0.94	0.33	100
Dec. 28/36	4.98	45.30	11.76	36.72	0.79	0.45	100
June 28/37	4.63	38.99	22.72	30.32	3.07	0.27	100
Dec. 27/37	5.03	51.09	11.69	29.95	1.67	0.57	100
June 27/38	5.52	50.63	17.09	25.23	1.15	0.38	100
Dec. 26/38	5.27	58.42	9.98	25.26	0.28	0.79	100
June 26/39	5.08	52.41	7.89	32.68	0.51	1.43	100
Dec. 25/39	3.94	50.74	7.52	35.62	0.07	2.10	100

Sources:- 1942 Year Book, P.543.

Index Nos. and Percentages of Total have been calculated.

See Also Gs 53 and 54.

(1) i.e., Reserve, less liabilities in currencies other than New Zealand currency, expressed as a percentage of notes and other demand liabilities.

TABLE 47.  
P.O.S.B. ACCOUNTS

Year ended 31/3	No. of Depositors at end of Year.	Total Deposits during Year.	Total Withdrawals during Year.	Excess of Deposits over Withdrawals.	Interest Credited.	Total Amount to Credit of Depositors at end of Year.
<u>AMOUNT.</u>						
1929	828296	27252381	28111940	- 859559	1745050	48644217
1930	852757	28561854	29575994	- 1014140	1806414	49436491
1931	878043	24531569	28063338	- 3531769	1763825	47668547
1932	877090	19463985	25488081	- 6024096	1611048	43255499
1933	797097	16933176	19635928	- 2702752	1475874	42028621
1934	798262	19428853	17818172	1610681	1231089	44870391
1935	817617	24179537	20946562	3232975	1320348	49423714
1936	840671	25619775	23533596	2086179	1406459	52916352
1937	880857	30676969	27042003	3634966	1514220	58065538
1938	920805	33041082	29629074	3412008	1669384	63146930
1939	946822	30434292	34297708	- 4163416	1726574	60710087
1940	960565	25151287	29462838	- 4311551	1603466	58002002
<u>INDEX. NO.</u>						
1929	100	100	100		100	100
1930	102.95	104.80	105.21		103.52	101.63
1931	106.01	90.02	99.83		101.08	97.99
1932	105.89	71.42	90.67		92.32	88.92
1933	96.23	62.13	69.85		84.57	86.40
1934	96.37	71.29	63.38		70.55	92.24
1935	98.71	88.72	74.51		75.66	101.60
1936	101.49	94.01	83.71		80.60	108.78
1937	106.35	112.57	96.19		86.77	119.37
1938	111.17	121.24	105.40		95.66	129.81
1939	114.31	111.68	123.07		98.94	124.80
1940	115.97	92.29	104.81		91.89	119.23

Sources: 1939 Year Book, p.587: 1941 Year Book, P.601. Index Nos. have been calculated. See also Gs 66,67.



TABLE 48.

DEPOSITS LODGED WITH TRUSTEE SAVINGS BANKS, BUILDING SOCIETIES,  
TRADING COMPANIES AND FRIENDLY SOCIETIES.

## DEPOSITS LODGED WITH:-

Year	Trustee Savings Banks.	Building Societies.	Trading Companies.	Friendly Societies.
1932	10,470,538	3,240,175	6,791,860	4,398,158
1933	10,847,709	3,181,411	6,189,745	4,538,095
1934	11,286,062	3,340,550	5,888,753	4,676,427
1935	11,773,482	3,558,896	5,699,336	4,812,787
1936	12,480,125	3,908,888	5,466,702	4,956,948
1937	13,339,416	4,225,323	5,327,400	5,120,125
1938	13,865,676	4,540,750	5,132,275	5,280,472
1939	13,907,334	4,756,722	5,077,059	5,407,601

Sources:- 1934 Year Book, pp.515,517; 1936 Year Book, p.559;  
1938 Year Book, pp.688,690; 1939 Year Book, p.589;  
1940 Year Book, pp.733,734,735; 1941 Year Book, p.p.  
603,604,640,641,642. See also G 68.

TABLE 49.

## BUILDING SOCIETIES ASSETS.

Year	Advances on Mortgage.	Other Invest- ments & Assets.	Cash in Hand and at Bank.	Total Assets.
<u>AMOUNT.</u>				
1929-30	7330910	323069	178308	7832287
1930-31	8051886	314824	192526	8559236
1931-32	8036753	330589	236341	8603683
1932-33	7945894	356324	273336	8575554
1933-34	7881372	429619	273159	8584150
1934-35	7917538	489511	307189	8714238
1935-36	8412691	506136	251265	9170092
1936-37	8749067	611356	244969	9605392
1937-38	9291811	613440	273996	10179247
1938-39	9855075	610048	189735	10754858
1939-40	10343089	575354	357602	11276045

INDEX NOS.

1929-30	100	100	100	100
1930-31	109.84	97.45	107.97	109.28
1931-32	109.63	102.33	132.55	109.85
1932-33	108.39	110.29	153.30	109.49
1933-34	107.51	132.98	153.20	109.60
1934-35	108.00	151.52	172.28	111.26
1935-36	114.76	156.66	140.92	117.08
1936-37	119.35	189.23	137.39	122.64
1937-38	126.75	189.88	153.67	129.97
1938-39	134.43	188.83	162.49	132.32
1939-40	141.09	178.99	200.55	143.97

PERCENTAGES OF TOTAL

1929-30	93.60	4.12	2.28	100
1930-31	94.07	3.68	2.25	100
1931-32	93.41	3.84	2.75	100
1932-33	92.66	4.16	3.18	100
1933-34	91.81	5.00	3.19	100
1934-35	90.85	5.62	3.53	100
1935-36	91.74	5.52	2.74	100
1936-37	91.09	6.36	2.55	100
1937-38	91.28	6.03	2.69	100
1938-39	91.63	5.67	2.70	100
1939-40	91.73	5.10	3.17	100

Sources: 1935 Year Book, p.539; 1940 Year Book, p.741;  
1941 Year Book, p.648.  
Index Nos. and Percentages have been calculated. See G70.

TABLE 50.  
TRUSTEE SAVINGS BANKS.

Year Ended 31/3	No. of Depositors at End of Year.	Total Amount of Deposits during Year.	Total Amount, of With- drawals during Year.	Excess of Deposits over Withdrawals.	Interest Credited.	Total Amount to Cr. of Depositor at end of Year.
1929	180015	6307509	5839660	467849	352863	8478119
1930	193084	6703622	6324762	378860	376526	9233505
1931	204467	6555286	6512469	42817	410264	9686586
1932	214517	6168032	6138770	29262	416385	10132233
1933	212673	5678843	5718258	- 39415	377720	10470538
1934	219732	5817846	5741989	75857	301314	10847709
1935	227925	6199211	6073447	125764	312589	11286062
1936	238108	6651525	6487282	164243	323177	11773482
1937	249227	7609364	7240419	368945	337698	12480125
1938	261019	8137472	7638820	498652	360639	13339416
1939	269335	8578068	8430467	147601	378659	13865676
1940	274471	8184114	8523416	- 339302	380960	13907334

INDEX NOS.

1929	100	100	100	100	100
1930	107.26	106.28	108.31	106.71	108.91
1931	113.58	103.93	111.52	116.27	114.25
1932	119.17	97.79	105.12	118.00	119.51
1933	118.14	90.03	97.92	107.05	123.50
1934	122.06	92.24	98.33	85.39	127.95
1935	126.61	98.28	104.00	88.59	133.12
1936	132.27	105.45	111.09	91.59	138.87
1937	138.45	106.37	123.98	95.70	147.20
1938	145.00	129.01	130.81	102.21	157.34
1939	149.62	136.00	144.36	107.31	163.55
1940	152.47	129.75	145.95	107.96	164.04

Sources: 1939 Year Book, p.589; 1941 Year Book, p.603.  
Index Nos. have been calculated.

Table 51

## Friendly Society Assets

Year.	Total Funds.	Funds Invested at Interest.					% of Funds Invest. @ interest.
		Mort. on freehold Property.	Govt. & Municip. Debs.	Deposit with Banks.	Other Invest.	Total	
Amounts.							
1929	3927433	3002848	1997591	96124	40253	3338984	85.02
1930	4130117	3186455	220723	81804	51385	3540367	85.72
1931	4277715	3275007	244159	89839	55771	3664776	85.67
1932	4398158	3350709	262155	92971	64162	3769997	85.72
1933	4538095	3424616	276262	114239	65074	3880301	85.51
1934	4676427	3501236	268127	148598	68198	3986159	85.24
1935	4812787	3643412	240363	135827	76030	4095632	85.10
1936	4956948	3782311	231540	135865	74917	4224633	85.23
1937	5120125	3953431	220654	160779	74607	4409471	86.12
1938	5280472	4145053	230587	148137	74115	4597892	87.07
1939	5407601	4297449	245167	120165	78723	4741504	87.68
1940	5534368	4399394	262030	145624	74641	4881689	88.21

Index Numbers.

1929	100	100	100	100	100	100
1930	105.16	106.12	110.49	85.10	127.66	106.03
1931	108.92	109.06	122.23	93.46	138.55	109.76
1932	111.19	111.59	131.23	96.72	159.40	112.91
1933	115.55	114.05	138.30	118.96	161.66	116.21
1934	119.07	116.60	134.22	154.59	169.42	119.38
1935	122.54	121.33	120.33	141.30	188.88	122.66
1936	126.21	125.96	115.91	141.34	186.12	126.52
1937	130.37	131.66	110.46	167.26	185.35	132.06
1938	134.45	138.04	115.43	154.11	184.12	137.70
1939	137.69	143.11	122.73	125.01	195.57	142.00
1940	140.92	141.51	131.17	151.49	185.43	146.20

Percentages of Total.

1929	89.93	5.98	2.88	1.21	100
1930	90.00	6.23	2.32	1.45	100
1931	89.37	6.66	2.45	1.52	100
1932	88.88	6.95	2.47	1.70	100
1933	88.26	7.12	2.95	1.67	100
1934	87.84	6.73	3.73	1.70	100
1935	88.96	5.87	3.22	1.85	100
1936	89.53	5.48	3.22	1.77	100
1937	89.66	5.00	3.65	1.69	100
1938	90.15	5.02	3.22	1.61	100
1939	90.63	5.17	2.54	1.66	100
1940	90.12	5.37	2.98	1.53	100

Sources: 1935 Year Book, P.535; 1940 Year Book, P.735. 1942 Year Book, P.596.

Index Nos. and Percentages have been calculated.

See also G69.

TABLE 52.  
LIFE ASSURANCE BUSINESS

<u>Year.</u>	<u>Policies issued.</u>			<u>Policies Discontinued.</u>			<u>Policies existing @ end of Year.</u>		
	<u>No.</u>	<u>Sum Assured.</u>	<u>Ann. Prem.</u>	<u>No.</u>	<u>Sum Assured.</u>	<u>Ann. Prem.</u>	<u>No.</u>	<u>Sum Assured.</u>	<u>Ann. Premium.</u>
					<u>Amount.</u>				
1929	28189	11534102	393685	17441	5515811	194040	258136	92130289	2997567
30	28321	11975361	413696	18106	5969955	207937	268351	98135695	3203326
1	24508	9166928	311904	22660	8125699	281384	270199	99176924	3233846
2	22353	8123793	280577	24403	8594783	300341	268149	98705934	3214082
3	24503	8357590	282756	22842	7995447	281020	269810	99068077	3215818
4	28554	9778967	312848	20444	6999072	246476	277920	101847972	3282190
5	35199	12605789	400140	19126	6292730	216015	293993	108161031	3466315
6	46026	16812497	539441	18887	6442382	222380	321132	118697031	3783376
7	50989	19376772	606720	19702	6475775	223508	352419	131598028	4166588
8	44211	16943706	510841	22754	8222169	292821	373874	140319565	4384608
1939	40404	16304251	479249	21709	7884027	259907	392569	148739789	4603950
					<u>Index Nos.</u>				
1929	100	100	100	100	100	100	100	100	100
30	100.47	103.83	105.08	103.81	108.24	107.16	103.96	106.52	100.86
1	86.94	79.48	79.23	129.92	147.32	145.01	104.67	107.65	107.88
2	79.30	70.43	71.27	139.92	155.82	154.78	103.88	107.14	107.22
3	86.92	72.46	71.82	130.97	144.96	144.83	104.52	107.53	107.28
4	101.30	84.78	79.47	117.22	126.89	127.02	107.66	110.55	109.47
5	124.87	109.29	101.64	109.66	114.09	111.33	113.89	117.29	115.64
6	163.28	145.76	137.02	108.29	116.80	114.61	124.40	128.81	126.21
7	180.88	167.99	154.11	112.96	117.41	115.19	136.52	142.84	139.00
8	156.84	146.90	129.76	130.46	149.07	150.91	144.84	152.30	146.27
1939	143.33	141.36	121.73	124.47	142.94	133.95	152.08	161.44	153.59

Sources: 1940 Year Book, P.709; 1941 Year Book, P.617.  
Index Nos. have been calculated.  
See Also Gs 71, 72, 73.

TABLE 53.  
INDUSTRIAL ASSURANCE BUSINESS

Year.	Policies Issued.			Policies discontinued.			Policies existing @ end of year.		
	No.	Sum Assured.	An. Prems.	No.	Sum Assured.	An. Prems.	No.	Sum Assured.	Ann. Prems.
					<u>Amount.</u>				
1929	56060	3051937	188530	38203	1872983	120455	273769	13141130	787274
30	53676	2952772	182306	43039	2162979	138231	284406	13930923	831349
1	43173	2243771	140711	51323	2648578	167169	276256	13526116	804891
2	46030	2251386	137739	47148	2389636	152315	275138	13387866	790315
3	52223	2380142	144983	38714	1960311	123559	288647	13807697	811739
4	57338	2599276	158486	35255	1658188	104369	310730	14708785	865856
5	58191	2752960	165212	35195	1719216	104175	333726	15742529	926893
6	64384	3189983	192400	33103	1616446	98588	365007	17316066	1020705
7	68630	3660466	218006	35033	1772749	107852	398604	19203783	1130859
8	65396	3562824	210254	37064	1990847	118176	426936	20775760	1222937
1939	53531	2998260	177672	37150	2098586	126907	443317	21675434	1273702
					<u>Index Numbers.</u>				
1929	100	100	100	100	100	100	100	100	100
30	95.75	96.75	96.70	112.66	115.48	114.76	103.88	106.01	105.60
1	77.01	73.52	74.64	134.34	141.41	138.78	100.91	102.93	102.24
2	82.11	73.77	73.06	123.41	127.59	126.45	100.50	101.88	100.39
3	93.16	77.99	76.90	101.34	104.66	102.58	105.43	105.07	103.11
4	102.28	85.17	84.06	92.28	90.67	86.65	113.50	111.93	109.98
5	103.80	90.20	87.63	92.13	91.79	86.49	121.90	119.79	117.73
6	114.85	104.52	102.05	86.65	86.30	81.85	133.33	131.77	129.65
7	122.42	119.94	115.63	91.70	94.65	89.54	145.60	146.13	143.64
8	116.65	116.74	111.52	97.02	106.29	98.11	155.95	158.10	155.34
1939	95.49	98.24	94.24	97.24	112.05	105.36	161.93	164.94	161.79

Sources; 1940 Year Book, P.712; 1941 Year Book, P.620.  
Index Nos. have been calculated.  
See Also Gs.74, 75, 76.

ASSURANCE COMPANY ASSETS.

Index Numbers. (Base: 1929 = 100.00.)

Percentages of Total.

Sources: 1936 Year Book, P. 543; 1940 Year Book, P. 715; 1942 Year Book, P. 576.  
Index Nos. and percentages have been calculated.  
See also G77.

TABLE 55

## INSURANCE CO. ASSETS

Year	House and Landed Property	N.Z. Government Securities	N.Z. Local Authority Securities	Mortgages etc.	Outstanding Premiums	Cash and Other N.Z. Assets	Total Assets in N.Z.
1929	1014873	4105048	1731704	330693	328401	2387321	9898040
30	1001524	4358785	1737096	311183	387718	2749191	10545497
1	1019519	4427001	1698927	294732	399115	2793109	10632403
2	1037820	5026165	1635235	315226	374001	2835879	11224326
3	1035858	7205729	2053656	522890	326950	2878482	14023565
4	1097671	6906648	1955376	400089	320258	3202197	13882239
5	1103029	6845777	2004828	409102	323323	3127232	13813291
6	1097376	6643750	2063356	399318	350397	2998450	13552647
7	1146049	6418033	1932767	345905	407735	3079754	13330243
8	1228445	6632296	1601139	368704	416812	3084891	13332287
9	1210895	6489352	1666670	352033	454073	3405995	13579018
1940	1228101	6691696	1497064	196312	496408	3531269	13640850

Sources: 1932 Year Book, P. 603; 1935 Year Book, P. 524; 1937 Year Book, P. 590;  
1940 Year Book, P. 724; 1942 Year Book, P. 584.  
See also G.78.

TABLE 56

## NEW JOINT STOCK COMPANIES REGISTERED

Year ended 31/12	No. of New Cos. Reg.		Aggregate Nom. Cap.		Av. Nom. Cap. per New Co.		No. of New Foreign Cos.	Agg. for Nom. Cap.		Year Book in which information upon which Foreign Com- panies Section is based.	
	No.	Index No.	£	Index No.	£	Index No.		£	Index No.		
1929	903	100	12472057	100	13812	100	20	1746225	100	1931	P. 971
30	893	99	6702675	54	7506	54	13	1163333	67	2	782
1	795	88	8283581	66	10420	75	16	4475396	256	3	645
2	812	90	6865769	55	8455	61	7	3420000	196	4	637
3	830	92	7300999	59	8796	64	14	3563600	204	5	654
4	750	103	7715776	62	10288	74	29	3045000	174	6	682
5	810	90	24238018	194	29923	217	19	8373700	480	7	760
6	942	104	9934903	80	10547	76	19	1348943	77	8	860
7	888	98	6113476	49	6885	50	8	818000	47	9	799
8	824	91	6575619	53	7980	58	11	1977000	113	1940	910
1939	681	75	8910167	71	13084	95	17	4485000	257	1941	814

Sources: As shown, plus 1941 Year Book, P. 814.

Note: The effect of the registration for the first time, in 1934, of many pre-existent Foreign Companies has been excluded as far as possible.

See Also Gs 82, 83.



TABLE 57.

## SHARE PRICES

Index Nos. 1938 = 1000.

<u>Year.</u>	<u>Industrial Shares.</u>	<u>All Shares.</u>
1930	835	1007
1	674	810
2	667	769
3	804	897
4	996	1051
5	1102	1112
6	1075	1057
7	1073	1069
8	1000	1000
9	959	952
1940	1024	999

Source:- 1942 Year Book, P.665.  
See Also G.83.

TABLE 58.

## MORTGAGES REGISTERED &amp; DISCHARGED.

<u>Year ended</u> <u>31/3/.</u>	<u>Mortgages Registered</u>		<u>Mortgages Discharged</u>		<u>Average R</u> <u>of Intere</u>
	<u>£</u>	<u>Index Nos.</u>	<u>£</u>	<u>Index Nos.</u>	
1930	38869144	100	28328993	100	6.35%
1	30208447	77.72	20056691	70.80	6.25
2	13410581	34.50	10036385	35.43	6.28
3	9161663	23.57	8149355	28.77	5.88
4	7802853	20.07	9086847	32.08	5.56
5	11845634	30.48	13732853	48.48	5.06
6	16227058	41.75	17553233	61.96	4.73
7	19700650	50.68	19803446	69.90	4.60
8	18144653	46.68	19361425	68.34	4.65
9	20050011	51.58	16598505	58.59	4.58
1940	17630260	45.36	14102043	47.78	4.69

Source:- 1941 Year Book, P.P.652, 656.  
Index Nos. have been calculated.  
See Also G79.

TABLE 59.

## BANKRUPTCY.

<u>Year</u>	<u>Number of</u> <u>Bankruptcies.</u>		<u>Average Debts Proved</u> <u>Per Estate.</u>		<u>Perce</u> <u>Divid</u> <u>to De</u>
	<u>No.</u>	<u>Index No.</u>	<u>£</u>	<u>Index No.</u>	
1929	687	100	731	100	10.91
30	780	113.53	1061	145.14	8.29
1	848	123.43	1229	168.13	6.06
2	661	96.22	945	129.28	8.95
3	450	65.50	1089	148.98	9.77
4	326	47.45	794	108.62	13.05
5	257	37.41	878	120.11	10.26
6	260	37.85	653	89.33	12.67
7	222	32.31	773	105.75	15.55
8	267	38.86	863	118.06	13.36
9	267	38.86	845	115.60	13.28
1940	213	31.00	591	80.85	24.17

Sources: 1935 Year Book, PP.552,553; 1942 Year Book, PP.618,619.  
Index Nos. have been calculated.  
See also G.80.

TABLE 60

## PATENTS, TRADE MARKS &amp; DESIGNS REGISTERED.

Year	Patents		Trade Marks		Designs	
	No.	Index Nos.	No.	Index Nos.	No.	Index N
1930	2103	100	1265	100	169	100
1	2065	98.19	999	78.97	151	89.
2	1845	87.73	925	73.12	164	97.
3	1761	83.73	814	64.35	143	84.
4	1766	83.98	915	72.33	146	86.
5	1730	82.27	943	74.55	185	109.
6	1836	87.30	1096	86.64	124	73.
7	1832	87.11	889	70.28	193	114.
8	1960	93.20	860	67.98	160	94.
1939	1821	86.59	694	54.86	137	81.

Source: 1941 Year Book, P.818.  
Index Nos. have been calculated.  
See also G.84.

TABLE 61

WHOLESALE PRICE INDEX NOS. Base: Av. 1926-30 = 1000

Year	Consumer's Goods			Producer's Materials and Goods			All Classes Combined	Imported Comm- odities	Locally Made Comm- odities
	Class I Food- stuffs	Class II Non-Food- stuffs	Classes I & II Com- bined	Class III Building & Constr- uction Materials	Class IV Materials for other Industries	Class III & VI Combined			
1930	963	956	960	976	962	965	963	959	967
1	837	923	873	954	920	928	901	938	852
2	783	923	841	924	908	911	878	933	802
3	801	935	857	987	930	943	902	986	788
4	824	920	864	990	933	946	907	977	810
5	915	933	922	992	938	950	936	980	876
6	917	932	923	1019	951	966	945	979	899
7	966	978	971	1172	1038	1068	1022	1062	967
8	992	979	986	1215	1043	1081	1036	1072	987
9	1088	1000	1051	1206	1057	1090	1071	1084	1053
1940	1121	1149	1131	1373	1214	1249	1195	1281	1078

Source: 1942 Year Book, P. 660.  
See Also G.87.

TABLE 62

RETAIL PRICE INDEX NUMBERS: Base: Av. 1926-30 = 1000.

Year	Food Groups.			Rent.	Fuel & Light.	Clothing Draper & Footwear.	Miscell- aneous.	All Groups Combined.
	Groceries	Dairy Prod.	Meat.	Three Food Groups.				
1929	973	999	1052	1013	1019	992	980	1004
30	932	939	1033	974	1007	991	947	981
1	891	807	834	845	953	987	869	906
2	857	722	747	775	844	958	814	838
3	819	661	714	732	766	890	816	795
4	845	666	796	774	758	841	832	808
5	899	749	846	835	774	865	828	837
6	878	801	912	870	804	887	837	864
7	945	902	1003	956	828	924	915	923
8	933	940	1075	991	858	964	936	951
9	1067	999	1077	1052	887	991	960	990
1940	1039	1010	1153	1076	916	1005	1061	1035

Source: 1942 Year Book, P658.  
See also G88.

TABLE 63.  
IMPORTED COMMODITIES PRICE INDEX.

Year.	Imported Commodities.	Wholesale Prices of Imported Commodities
1929		100
30		98
1		90
2		87
3		91
4		88
5		87
6		87
7		92
8		91
9		92
1940		109

Source: A re-calculation of figures given in 1942 Year Book, P.663.  
See Also G.86.

TABLE 64

## EXPORT PRICES INDEX NUMBERS

Year Ended 30/6/-	Group I Dairy Produce	Group II Meat	Group III Wool	Group IV Other Pastoral Produce	Groups I - IV: All Pastoral & Dairy Produce	Group V Agric. Produce	Group VI Timber	Group VII Minerals	All Groups Combined
1930	1000	1000	1000	1000	1000	1000	1000	1000	1000
1	767	803	648	626	741	901	912	1001	753
2	726	673	572	456	654	856	882	1010	669
3	639	618	554	407	595	850	846	1292	616
4	604	800	1008	619	766	874	877	1396	780
5	601	886	727	574	726	908	881	1581	749
6	741	890	937	773	844	969	853	1628	862
7	786	918	1522	977	987	1007	950	1647	1000
8	892	976	1119	854	976	1018	1067	1696	992
9	904	949	986	596	924	1022	1116	1745	944
1940	977	981	1250	782	1032	955	1064	2011	1049

Sources: A recalculation of figures given in the 1940 Year Book, P. 801;  
and in the 1941 Year Book, P. 712.  
See Also G89.

Date

Net Overseas Funds

TABLE 65  
TOTAL EXCHANGE OF BANKS

31/12/34  
24/6.35  
30/12/35  
29/6/36  
28/12/36  
28/6/37  
27/12/37  
27/6/38  
26/12/38  
26/6/39

40528615  
46023854  
36088539  
43956445  
28080537  
36956036  
23655082  
26125518  
6806733  
9088221

25/12/39: 15811153  
Source: 1941 Year Book, P. 600. See Also G56.

TABLE 66  
EXPORTS CLASSIFIED ACCORDING TO TYPE

Year.	Food Drink & Tobacco.	Raw Materials and articles mainly un- manufactured.	Articles wholly or mainly manufac- tured.	Miscell- aneous.	Bullion.	Total Merch- ise Expor
			<u>Amount.</u>			
1930	31676693	10835146	7494255	345618	588805	44940
31	25724199	7255749	1107610	254031	609109	34950
32	25794112	7269946	1093495	239773	1212593	35609
33	28437190	9784925	1141632	261823	1380349	41005
34	29210956	15294036	1121438	323069	1393348	47342
35	33315232	10141651	1209680	357561	1514257	46538
36	36398204	17214582	1234704	443732	1460718	56751
37	39836459	22642172	1317848	429514	1487386	66713
38	40317724	15055825	1237322	425484	1339918	58376
39	40017415	14609193	1233955	524182	1664571	58045

			<u>Index Numbers.</u>			
1930	100	100	100	100	100	100
31	81.21	66.97	74.12	73.50	103.44	77.7
32	81.43	67.10	73.18	69.38	205.94	79.4
33	89.77	90.31	76.40	75.76	234.43	91.4
34	92.21	141.15	75.05	93.48	236.64	105.4
35	105.17	93.60	80.96	103.46	257.17	103.4
36	114.90	158.88	82.63	128.39	248.08	126.4
37	125.76	218.20	88.19	124.27	252.61	148.4
38	127.27	138.95	82.81	123.11	227.57	129.4
39	126.33	134.83	82.58	151.67	282.70	129.4

			<u>Percentages of Total.</u>			
1930	70.48	24.12	3.32	0.77	1.31	100
31	73.60	20.76	3.17	0.73	1.74	100
32	72.44	20.41	3.07	0.67	3.41	100
33	69.35	23.84	2.78	0.64	3.37	100
34	61.71	32.30	2.37	0.68	2.94	100
35	71.59	21.79	2.60	0.77	3.25	100
36	64.14	30.33	2.18	0.70	2.57	100
37	59.72	35.44	1.97	0.64	2.23	100
38	69.06	25.79	2.12	0.73	2.30	100
39	68.9	25.17	2.13	0.90	2.87	100

Source:- 1941 Year Book, P.200.

Index Nos. and Percentages have been calculated.

See Also G92.

TABLE 67.

## EXPORTS CLASSIFIED ACCORDING TO ITEMS.

Export Items.	1930	1	2	3	4	5	6	7	8	1939
<u>Value of Exports - Amount (£)</u>										
Gold.	550678	581032	1092288	1281612	1320690	1441790	1398656	1435216	1296839	1628526
Butter.	11854056	10649527	10639053	11648699	10042776	13616740	15317576	16986477	16520226	16111207
Cheese.	6438438	4461293	4951268	4766351	4694459	4376512	5112438	5371878	5935061	5869890
Frozen Meats.	10937382	8892555	8436306	9845627	11886955	12768968	13239414	14689616	15092059	15390801
Sheep-Skins and Pelts.	1516738	805838	694217	1043208	1250091	1275464	1703130	2246015	1369324	1460072
Wool.	7664362	5515376	5742821	7422266	12516425	7097133	13293706	19070240	12185483	11665909
<u>Index Nos.</u>										
Gold.	100.00	105.51	198.35	232.73	239.83	261.82	253.99	260.63	235.50	295.73
Butter.	100.00	89.84	89.75	98.27	84.72	114.87	129.22	143.30	139.36	135.91
Cheese.	100.00	69.29	76.90	72.65	72.91	67.97	79.40	83.43	92.18	91.17
Frozen Meats.	100.00	81.30	77.13	90.02	108.68	116.75	121.05	134.31	137.99	140.72
Sheepskins & Pelts.	100.00	53.13	45.77	68.19	82.42	84.09	112.29	148.08	90.28	96.26
Wool.	100.00	71.96	74.93	96.84	163.31	92.60	173.45	248.8	158.99	152.21
<u>Percentage of Total.</u>										
Gold.	1.25	1.69	3.12	3.17	2.82	3.13	2.49	2.17	2.24	2.83
Butter.	26.81	31.03	30.42	28.83	21.47	29.56	27.22	25.65	28.58	28.04
Cheese.	14.56	13.00	14.16	11.80	10.04	9.50	9.09	8.11	10.27	10.22
Frozen Meats.	24.74	25.91	24.12	24.36	25.41	27.72	23.53	22.19	26.11	26.79
Sheep Skins & Pelts.	3.43	2.35	1.98	2.58	2.67	2.77	3.03	3.39	2.37	2.54
Wool.	17.34	16.07	16.42	18.37	26.76	15.41	23.63	23.80	21.08	20.31
Total. Six Major Inds.	88.13	90.05	90.22	89.11	89.17	88.09	88.99	90.31	90.65	90.73
<u>Volume of Exports - Index Nos:</u>										
Gold	100.00	105.40	150.02	132.52	121.49	128.06	125.66	128.84	114.01	131.87
Butter	100.00	105.54	115.99	139.86	138.76	148.03	148.40	157.95	138.76	129.67
Cheese	100.00	90.26	98.76	109.37	109.46	95.29	91.46	90.85	88.83	92.51
Frozen Meat.	100.00	102.53	115.08	128.90	123.11	121.98	126.83	134.04	133.11	146.32
Sheep Skins & Pelts.	100.00	109.67	123.78	137.88	110.66	128.59	114.59	113.46	128.66	137.54
Wool	100.00	107.32	120.73	145.13	129.66	112.87	159.37	143.12	137.51	140.61

Sources: 1936 Year Book, P.202,203,204 1941 Year Book, P.204,205,206.

Index Nos. and Percentages have been calculated. See Also G.94.

TABLE 68

## DESTINATION OF N.Z. EXPORTS

Year	U.K.	Canada	Australia	France	Germany	U.S.A.	Others	Total Merch.
<u>Amount</u>								
1930	36015128	2539212	1562281	519727	401084	2116752	1786333	44940517
31	30739976	256890	1167403	419016	309847	920931	1136635	34950698
32	31344670	244160	1444860	508960	489917	690015	1087337	35609919
33	35275909	560875	1393311	738176	376886	1188972	1471790	41005919
34	38629240	697865	1882516	1228699	944310	1250364	2709853	47342847
35	38921568	656984	1781811	484610	165304	2468064	2060038	46538381
36	45492989	1103008	1843475	1646168	272481	2877752	3516067	56751940
37	50705591	1678403	1824183	1014941	919148	4784099	5787014	66713379
38	48897990	1127124	2189454	1015456	890976	1421630	2833653	58376283
39	46689198	963710	2256007	1579176	390006	2847158	3324061	58049316
<u>Index Numbers</u>								
1930	100	100	100	100	100	100	100	100
31	85.35	10.11	74.72	80.62	77.25	43.51	63.63	77.77
32	87.03	9.62	92.48	97.93	72.78	32.60	60.87	79.24
33	97.95	22.09	89.18	142.03	93.97	56.17	82.39	91.24
34	107.26	27.48	120.50	236.41	235.44	59.07	151.70	105.34
35	108.07	25.87	114.05	93.24	41.21	116.60	115.32	103.55
36	126.32	43.44	118.00	316.74	67.94	135.95	196.83	126.28
37	140.79	66.10	116.76	195.28	229.17	226.01	323.96	148.44
38	135.77	44.39	140.14	195.38	222.14	67.16	158.63	129.89
39	129.64	37.95	144.40	303.85	97.24	134.50	186.08	129.17
<u>Percentage of Total</u>								
1930	80.14	5.65	3.48	1.16	0.89	4.71	3.97	100
31	87.96	0.73	3.34	1.20	0.89	2.63	3.25	100
32	88.02	0.69	4.06	1.43	0.81	1.94	3.05	100
33	86.02	1.39	3.40	1.70	0.92	2.89	3.59	100
34	81.59	1.47	3.98	2.60	1.99	2.64	5.73	100
35	83.63	1.41	3.83	1.04	0.36	5.30	4.43	100
36	80.16	1.94	3.24	2.90	0.48	5.08	6.20	100
37	76.00	2.52	2.73	1.52	1.38	7.17	8.68	100
38	83.76	1.93	3.75	1.74	1.53	2.44	4.85	100
39	80.43	1.66	3.89	2.72	0.67	4.90	5.73	100

Source: 1941 Year Book, P. 206.

Index Nos. and Percentages have been calculated.

See Also G93.

TABLE 69

## IMPORTS CLASSIFIED ACCORDING TO TYPES

Year	Food Drink Tobacco	Raw Mat- erials & Articles mainly manufact.	Articles Wholly or Mainly manufact.	Miscell. and Un- classified	Bullion	Total Merchandise
<u>Amount</u>						
1930	6066542	1889673	36121373	259095	2971	44339654
31	4453212	1437495	20460797	144250	2397	26498151
32	4180284	1234754	19072507	156752	1709	24646006
33	4016842	1157532	20257535	147403	2054	25581366
34	4510428	1377410	25241859	207131	2724	31339552
35	5038719	1564163	29497032	214843	2510	36317267
36	5472112	1691797	36848951	241957	4069	44258886
37	6701299	1953120	47203577	299149	3550	56160695
38	7132659	2243142	45808987	233057	4344	55422189
39	6516990	2450288	40171398	233333	15174	49387183
<u>Index Nos.</u>						
1930	100		100	100		100
31	73.41	76.07	56.64	55.67	80.68	59.76
32	68.91	65.34	52.80	60.50	57.52	55.58
33	66.21	61.26	56.08	56.89	69.13	57.69
34	74.35	72.89	69.88	79.94	91.69	70.68
35	83.06	82.77	81.66	82.92	84.48	81.91
36	90.20	89.53	102.01	93.39	136.96	99.82
37	110.46	103.36	130.68	115.46	119.49	126.66
38	117.57	118.71	126.82	89.95	146.21	124.99
39	107.42	129.67	111.21	90.06	510.74	111.38
<u>Percentages of Total</u>						
1930	13.69	4.26	81.46	0.58	0.01	100
31	16.81	5.42	77.22	0.54	0.01	100
32	16.96	5.01	77.38	0.64	0.01	100
33	15.70	4.52	79.19	0.58	0.01	100
34	14.39	4.40	80.54	0.66	0.01	100
35	13.87	4.31	81.22	0.59	0.01	100
36	12.36	3.82	83.26	0.55	0.01	100
37	11.93	3.48	84.05	0.53	1.01	100
38	12.87	4.05	82.65	0.42	0.01	100
39	13.20	4.96	81.34	0.47	0.03	100

Source: 1941 Year Book, P.224.

Index Nos. and Percentages have been calculated.

See Also G95.



TABLE 70  
IMPORTS CLASSIFIED ACCORDING  
TO ITEMS

Classes of Imports as a Percentage of Total Imports

	1934	1935	1936	1937	1938	1939
Prod. Materials						
Building & Constr.	5.74	6.54	6.85	6.91	7.47	7.10
Farm	2.52	2.39	2.37	2.40	2.19	2.70
Manufacturing						
Food	4.27	4.23	3.48	3.55	3.89	4.04
Beverages	0.11	0.21	0.14	0.14	0.10	0.06
Tobacco	0.59	0.55	0.51	0.44	0.59	1.11
Textiles, Apparel or Household Goods	12.12	10.83	10.41	9.50	7.14	8.90
Other	16.46	15.88	15.34	14.86	14.72	15.88
Fuels and Licks	5.98	5.22	5.73	5.14	5.58	6.66
Aux. Aids to Prodr.	2.65	2.45	2.08	1.80	1.80	2.19
Producers' Equip.						
Farm	2.09	2.48	2.81	3.02	2.90	2.35
Comm. & Ind.	6.34	7.73	9.30	9.85	11.30	11.27
Transport Equip.						
Railway	0.76	0.79	0.72	0.82	2.05	2.80
Road	11.35	12.48	13.44	13.59	12.70	11.33
Other	0.16	0.51	0.08	0.24	0.37	0.23
Consumers' Goods						
Food	4.09	3.92	3.42	3.48	3.87	3.42
Beverages	4.20	3.56	3.39	2.96	2.98	3.27
Tobacco	1.31	1.57	1.47	1.38	1.49	1.13
Clothing & Accessories	7.12	6.17	5.77	6.47	5.54	3.79
Household Equip.	4.68	4.97	5.18	5.90	5.50	4.28
Other	7.42	7.37	7.27	7.16	7.26	7.48
Unclassified	0.04	0.15	0.24	0.37	0.56	0.01
Totals	100.00	100.00	100.00	100.00	100.00	100.00

Sources: 1940 Year Book, P. 274.  
          1941 Year Book, P. 228.

TABLE 71

## IMPORTS CLASSIFIED ACCORDING TO COUNTRY OF ORIGIN

## DATES

	Amount (£1,000,000)										
	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
U.K.	20.33	12.19	11.50	10.84	15.79	18.28	21.85	27.86	26.53	23.13	22.95
Canada	3.80	1.22	1.01	1.01	2.10	2.45	3.33	4.56	4.86	4.38	2.89
Australia	3.31	2.44	2.69	2.67	3.24	3.96	4.94	6.60	7.16	6.42	7.82
Total U.K., Can., Aust.	27.44	15.85	15.20	14.52	21.13	24.69	30.12	39.02	38.55	33.93	33.66
Other Brit. Countries	2.15	1.58	1.36	1.47	2.01	1.91	2.07	2.27	2.22	2.72	4.05
Total Brit. Possessions, Protectorates etc.	29.59	17.43	16.56	15.99	23.14	26.60	32.19	41.29	40.77	36.65	37.71
U.S.A.	7.57	3.89	3.27	2.38	3.75	2.47	5.61	6.96	6.86	5.61	6.09
Other Foreign Countries	5.87	3.49	3.22	3.08	4.45	7.25	6.46	7.91	7.79	7.13	5.20
Total Foreign Countries	13.43	7.38	6.49	5.46	8.20	9.72	12.07	14.87	14.65	12.74	11.29
Total M.	43.03	24.81	23.05	21.45	31.34	36.32	44.26	56.16	55.42	49.39	49.00
	Index Numbers										
U.K.	100	59.96	56.57	53.32	77.67	89.92	107.48	137.04	130.50	113.77	112.89
Canada	100	32.11	26.58	26.58	55.26	64.47	87.63	120.00	127.90	115.26	76.05
Australia	100	73.71	81.27	80.66	97.88	119.64	149.24	199.39	216.31	193.95	236.25
Total U.K. Can. Aust.	100	57.76	55.39	52.92	77.00	89.98	109.77	142.20	140.49	123.65	122.67
Other Brit. Countries	100	73.49	63.26	68.37	93.49	88.84	96.28	105.58	103.26	126.51	188.37
Total Brit. Possessions, Protectorates Etc.	100	58.90	55.96	54.04	78.20	89.89	108.79	139.54	137.78	123.86	127.44
U.S.A.	100	51.39	43.20	31.44	49.54	32.63	74.11	91.94	90.62	74.11	80.45
Other Foreign Countries	100	59.46	54.86	52.47	75.81	123.51	110.05	134.75	132.71	121.47	88.59
Total Foreign Countries	100	54.95	48.32	40.66	61.06	72.38	89.87	110.72	109.08	94.86	84.07
Total M.	100	57.66	53.57	49.85	72.83	84.41	102.86	130.52	128.80	114.78	113.88
	Percentages of Total										
U.K.	47.25	49.13	49.89	50.54	50.38	50.33	49.37	49.61	47.87	46.83	46.83
Canada	8.83	4.92	4.38	4.70	6.70	6.75	7.52	8.12	8.77	8.87	5.90
Australia	7.69	9.83	11.67	12.45	10.34	10.90	11.16	11.75	12.92	13.00	15.96
Total U.K. Can. Aust.	63.77	63.88	65.94	67.69	67.42	67.98	68.05	69.48	69.56	68.70	68.69
Other Brit. Countries	5.00	6.37	5.90	6.86	6.41	5.26	4.68	4.04	4.01	5.51	8.27
Total Brit. Poss., Protec. ec.	68.77	70.25	71.84	74.55	73.83	73.24	72.73	73.52	73.57	74.21	76.96
U.S.A.	17.59	15.68	14.19	11.10	11.96	6.80	12.68	12.39	12.38	11.36	12.43
Other Foreign Countries	13.64	14.07	13.97	14.35	14.21	19.96	14.59	14.09	14.05	14.43	10.61
Total Foreign Countries	31.23	29.75	28.16	25.45	24.17	26.76	27.27	26.48	26.43	25.79	23.04
Total M.	100	100	100	100	100	100	100	100	100	100	100

Sources: A summary of figures given under a similar heading in each of the Year Books.  
Index Nos. and Percentages of the total have been calculated. See Also G96.

TABLE 72  
VALUE OF IMPORTS PLUS CUSTOMS DUTY.

Years ended 31/3/ .	Value of Imports.	Customs Duty.	Combined Value of Imports and Customs Cuty.
1929	£46.5 m	£ 8.0 m	£54.5 m
30	49.3	8.8	58.1
1	35.1	7.6	42.7
2	24.7	5.9	30.6
3	25.3	6.1	31.4
4	26.7	6.5	33.2
5	34.3	7.5	41.8
6	39.5	8.2	47.7
7	50.1	9.5	59.6
8	57.5	10.8	68.3
9	56.5	10.7	67.2
1940	46.1	9.9	56.0

Sources: The Import Figures given in table 1, and  
the 1934 Year Book, P.425; 1936 Year Book,  
P.443, 1941 Year Book, PP. 504 & 505.

See Also G.97.

TABLE 73  
FARM INCOME

Index base: 1920 = 100.

Years ended 31/3.	Agricultural Produce.				Pastoral Produce				Produce of Dairying, Poultry, Bees.				All Farm Produce.			
	Gross Farm Income	Volume Index	Price Index	Value Index	Gross Farm Income	Volume Index	Price Index	Value Index	Gross Farm Income	Volume Index	Price Index	Value Index	Gross Farm Income	Volume Index	Price Index	Value Index
1929	£7.3m	100	100	100	£31.6m	100	100	100	£25.5m	100	100	100	£64.4m	100	100	100
30	7.4	95	106	101	24.6	99	79	78	24.4	109	88	96	56.4	102	86	88
1	6.7	103	89	92	18.3	102	57	58	17.9	111	63	70	42.9	106	63	67
2	6.5	96	93	89	14.6	108	43	46	17.4	115	59	68	38.5	109	55	60
3	6.9	123	77	95	14.7	115	41	47	16.5	131	50	65	38.1	122	48	59
4	7.0	112	86	96	23.4	115	65	75	17.8	141	50	70	48.2	125	60	75
5	6.0	94	87	82	21.8	113	61	69	18.3	137	53	72	46.1	120	60	72
6	7.4	112	90	101	26.5	121	69	84	23.9	144	65	94	57.8	129	70	90
7	7.2	97	102	99	36.7	124	94	117	27.5	148	73	108	71.4	130	85	111
8	7.3	197	104	100	31.9	124	82	102	28.9	142	80	113	68.1	128	83	106
9	8.2	90	124	112	30.0	135	71	96	29.1	131	87	114	67.3	128	82	105
1940	9.4	107	121	129	32.3	128	81	103	31.9	140	87	122	73.6	131	85	112

Sources: 1941 Year Book, PP 342, 343; 1942 Year Book PP 324, 325.

Some of the index numbers have been recalculated onto a 1929=100 base.

See Also G98.

TABLE 74  
PRINCIPAL CROPS

	1930-31	31-32	32-33	33-34	34-35	35-36	36-37	37-38	38-39	39-40
	<u>Acres</u>									
Wheat	252219	280602	305924	294992	230523	252423	224637	191862	193332	260779
Oats	367551	364345	424587	364729	336418	363296	314704	289763	279796	268541
Barley	31034	27040	23476	29607	28731	27777	25512	31604	32528	31728
Maize	12103	11460	15150	17275	16100	17126	13678	12403	12229	14352
Peas	10558	14701	22370	30362	25366	25014	18094	14800	13678	22089
Beans	140	168	93	263	127	177	231	71	83	123
Linseed	12200	1765	333	1441	2930	1806	614	662	21	1216
Hops	634	466	355	510	590					
Potatoes	28459	23786	24605	25028	23001	22958	22462	23090	18032	20033
Turnips	493902	482229	472995	478652	449513	441854	431349	432651	385846	404841
Mangolds	10706	9824	11961	13745	11211	13210	10279	8270	8872	9610
Onions	771	874	1134	1112	923	928	719	618	674	839
Tobacco	932	1726	2126	1803	1358	1518	2132	1972	1807	1828
Green Fodder	180308	199624	186992	201508	193942	207212	210662	211504	189601	209233
Grasses and Clovers for Seed	89184	73582	135962	93344	133933	134405	96577	80463	109695	112142
Grasses and Clovers for Hay, Ensilage etc.	409586	431592	526469	470412	484751	536018	504253	443880	518919	554607
Lucerne	33502	32568	35867	35906	39087	30857	38802	38691	37023	39614
Other Crops	2994	2785	3626	3858	3890	4166	3150	3045	3507	4521
Totals	1936783	1959137	2192025	2064547	1982394	2090745	1918855	1785329	1807445	1956096
	<u>Percentages of Total</u>									
Wheat	13.02	14.32	13.96	14.29	11.63	12.07	11.71	10.75	10.70	13.33
Oats	18.98	18.60	19.37	17.67	16.97	17.38	16.40	16.23	15.48	13.72
Barley	1.60	1.38	1.07	1.43	1.45	1.33	1.33	1.77	1.80	1.62
Maize	0.62	0.58	0.69	0.84	0.81	0.82	0.71	0.69	0.68	0.73
Peas	0.55	0.75	1.02	1.47	1.28	1.20	0.94	0.83	0.76	1.13
Beans	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0	0	0.01
Linseed	0.63	0.09	0.02	0.07	0.15	0.09	0.03	0.04	0.10	0.06
Hops	0.03	0.02	0.02	0.02	0.03					
Potatoes	1.47	1.21	1.12	1.21	1.16	1.10	1.17	1.29	1.00	1.02
Turnips	25.50	24.61	21.58	23.18	22.68	21.13	22.48	24.23	21.35	20.70
Mangolds	0.55	0.50	0.55	0.67	0.57	0.63	0.54	0.46	0.49	0.49
Onions	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.03	0.04	0.04
Tobacco	0.05	0.09	0.10	0.09	0.07	0.07	0.11	0.11	0.10	0.09
Green Fodder	9.31	10.19	8.44	9.76	9.78	9.91	10.98	11.85	10.49	10.70
Grasses and Clovers for Seed	4.60	3.76	6.20	4.52	6.76	6.43	5.03	4.51	6.07	5.73
Grasses and Clovers for Hay, Ensilage etc.	21.15	22.03	24.02	22.79	24.45	25.64	26.28	24.86	28.71	28.35
Lucerne	1.73	1.66	1.64	1.74	1.97	1.48	2.02	2.17	2.05	2.03
Other Crops	0.15	0.14	0.17	0.19	0.20	0.20	0.16	0.17	0.19	0.23
Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Sources: 1936 Year Book, P. 338.  
1941 Year Book, P. 374.  
Percentages of total have been calculated.  
See Also G99.

TABLE 75.

## YIELDS PER ACRE

Year	Wheat (Bushels)	Oats (Bushels)	Barley (Bushels)	Maize (Bushels)	Peas (Bushels)	Linseed (Q.w.t.)
1930-31	30.44	38.74	34.97	44.20	22.86	7.16
1-2	24.49	41.03	29.45	63.35	21.05	7.23
2-3	36.54	44.16	34.34	47.77	26.17	8.12
3-4	31.56	41.39	34.77	45.20	23.00	8.72
4-5	26.32	35.99	26.28	46.97	17.21	5.87
5-6	35.63	42.61	36.08	42.73	23.04	6.39
6-7	32.32	47.15	36.36	45.21	27.47	7.44
7-8	32.50	45.60	42.66	48.08	26.09	7.83
8-9	29.40	47.87	40.03	44.65	28.80	7.32
1939-40	31.10	41.83	36.25	50.76	26.41	7.23

Sources: 1936 Year Book, P. 339; 1941 Year Book, P. 375.

TABLE 76.

## LIVESTOCK

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
<u>Numbers</u>											
Horses	297195	295743	280994	276897	273906	272986	276170	277799	278167	274803	271581
Dairy Cows	1441410	1601633	1702070	1845972	1932511	1952094	1951507	1935524	1872797	1853713	1850071
Cattle (Incl. Dairy Cows)	3770223	4080525	4072383	4192023	4301128	4293499	4254078	4389101	4506082	4564948	4533032
Sheep Shorn during Season	26999410	27574289	26205019	25069409	25017656	25639654	26278477	27319185	28509668	29146130	29041538
Lambs Shorn during Season	*	*	2542470	2629837	3508008	3529202	3618648	4263403	4192023	3923101	4119270
Lambs Tailed during Season	14887599	14528309	14974991	15015628	15278797	15689492	15696617	16866021	17340914	16948979	17229569
Sheep incl. lambs as at April 30th	30841287	29792516	28691788	27755966	28649038	29076754	30113704	31305818	32378774	31697091	31062875
Pigs	487793	476194	513416	591582	660393	762755	808463	802419	756466	683463	714001

Sources: 1935 Year Book, P. 332; 1936 Year Book, P. 348; 1941 Year Book, P. 389.

Percentage increases have been calculated.

See Also G100.

## Percentage Increases over Previous Years

Horses	-0.52	-4.99	-1.46	-1.08	-0.34	+1.17	+0.59	+0.13	-1.21	-1.17
Dairy Cows	+11.12	+6.27	+8.45	+4.69	+1.01	-0.04	-0.82	-3.24	-1.02	-0.29
Cattle (Incl. Dairy Cows)	+8.23	-0.20	+2.94	+2.81	-0.18	-0.92	+3.17	+2.67	+1.31	-0.70
Sheep Shorn during Season	+2.13	-4.70	-4.33	-0.21	+2.49	+2.49	+3.96	+4.36	+2.23	-0.36
Lambs Shorn during Season			+3.44	+33.39	+0.60	+2.53	+17.82	-1.67	-6.42	+5.00
Lambs Tailed during Season	-2.41	+3.07	+0.27	+1.75	+2.69	+0.05	+7.45	+2.82	-2.26	+1.66
Sheep incl. lambs as at April 30th	-3.40	-3.69	-3.26	+3.22	+1.49	+3.57	+3.96	+3.43	-1.49	-2.62
Pigs	-2.38	+7.82	+15.22	+11.63	+15.50	+5.99	-0.75	-5.73	-9.65	+4.47

Sources: 1935 Year Book, P. 332; 1936 Year Book, P. 348; 1941 Year Book P. 389.

Percentage increases have been calculated. See Also G100.

TABLE 77

## AREA UNDER CULTIVATION

Year	Pasture Land*	Field Crops	Plantations	Orchards	Lying Fallow	Other Cultivated Land	Total Cultivated Area
<u>Amount</u>							
1930-31	16513765	1936149	341591	28134	108415	78824	19006878
1-2	16285090	1958671	399307	25755	94159	86619	18849601
2-3	16221324	2191670	409860	25317	96018	89436	19033625
3-4	16472604	2064037	427471	25069	105706	91801	19186748
4-5	16501811	1981804	753684	25087	115832	96301	19474519
5-6	16543750	2090745	779877	25072	107109	97005	19643558
6-7	16610903	1918855	787965	24856	118843	98584	19560006
7-8	16731607	1785329	846974	22397	181414	95280	19663001
8-9	16783612	1807445	844473	21753	140925	95791	19693949
1939-40	16632608	1956096	839906	20899	112195	97645	19659349
<u>Index Numbers</u>							
1930-31	100	100	100	100	100	100	100
1-2	98.61	101.16	108.91	91.54	86.85	109.89	99.17
2-3	98.23	113.20	111.79	89.99	88.57	113.46	100.14
3-4	99.75	106.61	116.59	89.11	97.56	116.46	100.95
4-5	99.93	102.36	205.57	89.17	106.84	122.17	102.46
5-6	100.18	107.98	212.71	89.12	98.80	123.07	103.35
6-7	100.59	99.11	214.92	88.35	109.62	125.07	102.91
7-8	101.32	92.21	231.01	79.61	167.33	120.88	103.45
8-9	101.63	93.35	230.31	77.32	129.99	121.53	103.61
1939-40	100.72	101.03	229.08	74.28	103.49	123.88	103.43
<u>Percentages of Total</u>							
1930-31	86.88	10.19	1.80	0.15	0.57	0.41	100
1-2	86.39	10.39	2.12	0.14	0.50	0.46	100
2-3	85.22	11.50	2.15	0.13	0.50	0.48	100
3-4	85.85	10.76	2.23	0.13	0.55	0.48	100
4-5	84.74	10.18	3.87	0.13	0.59	0.49	100
5-6	84.22	10.64	3.97	0.13	0.55	0.49	100
6-7	84.92	9.81	4.03	0.13	0.61	0.50	100
7-8	85.09	9.08	4.32	0.11	0.92	0.48	100
8-9	85.22	9.18	4.29	0.11	0.72	0.48	100
1939-40	84.60	9.95	4.27	0.11	0.57	0.50	100

Sources: 1941 Year Book, P. 374. See Also G101.  
Index Nos. and Percentages have been calculated.

TABLE 78  
GREASY-WOOL PRODUCTION & USE

Year ended 30/6.	Exports.	Used by N.Z. Mills.	Variation in Stocks.	Estimated Total Production.
		Million Pounds	Weight.	
1930	202.7	5.5	+53.5	261.7
1	239.6	5.3	+13.7	258.6
2	243.7	6.1	+19.7	269.5
3	306.0	7.1	-36.0	277.1
4	311.9	6.8	-29.1	289.6
5	220.8	7.1	+37.1	265.0
6	339.9	7.8	-43.4	304.3
7	307.0	7.7	-11.8	302.9
8	275.7	7.2	+13.9	296.8
9	327.1	7.3	-6.7	327.7
1940	292.9	10.4	+6.7	310.0

Sources: 1940 Year Book, P.450.  
1941 Year Book, P.393.  
See Also G.102.

TABLE 79.  
COW POPULATION

Year.	No. of Cows	Index Nos. of Cows.
1930		
31		
2		
3	1247279	100
4	1324063	106.16
5	1359534	109.00
6	1377533	110.44
7	1403755	112.55
8	1410889	113.12
9		
1940	1445756	115.91

Source: The Year Books, e.g. 1941 Year Book, P.349.  
Index Nos. have been calculated.  
See Also G.103.

TABLE 80  
DAIRY PRODUCTION

Factory Year	Creamery Butter.		Whey Butter.		Cheese.	
	Cwt.	Index Nos.	Cwt.	Index Nos.	Cwt.	Index Nos.
1930-1	2306842	100	35213	100	1857852	100
1-2	2439069	105.73	40107	113.90	1781782	95.91
2-3	2926449	126.86	47792	135.72	2071181	111.48
3-4	3187212	138.16	50826	144.34	2135599	114.95
4-5	3105974	134.64	51081	145.06	1914458	103.05
5-6	3322699	144.04	43880	124.61	1769984	95.27
6-7	3507206	152.03	45901	130.35	1826302	98.30
7-8	3258215	141.24	49188	139.69	1769351	95.24
8-9	2910646	126.17	46576	132.27	1705277	91.79
1939-40	3103797	134.55	51309	145.71	1952748	105.11

Sources: The Year Books, - e.g. 1941 Year Book, P.398.  
Index Nos. have been calculated.  
See also G.104.

TABLE 81.  
ESTIMATED DAIRY COW YIELD.

Season.	Estimated Yield.
1930-31	214.74 lb.
2	214.71
3	230.33
4	234.91
5	224.26
6	233.25
7	245.05
8	238.05
9	215.94
1939-40	238.56

Source: The Year Books.  
See also G.106.

TABLE 82.  
TOTAL BUTTER-FAT PRODUCTION.

Season.	Total B/F. Production.
1930-31	322.0 mill lb.
2	339.8
3	397.1
4	426.7
5	409.9
6	425.3
7	442.4
8	419.9
9	376.7
1939-40	415.0

Source: The Year Books.  
See Also G.105.



**TABLE 83.**  
**LIVESTOCK SLAUGHTERINGS.**

Years ended	Total Slaughtering.		Exports.		% of Slaught.
31/3.	Amount.	Index Nos.	Amount.	Index Nos.	
<u>Mutton (Carcasses)</u>					
1931	4263536	100	2581477	100	60.55
2	5233719	122.76	2343148	90.77	44.78
3	4356412	102.18	2354184	91.20	54.04
4	3556134	83.41	2010084	77.87	56.52
5	3042823	92.48	208888	80.92	52.98
6	3260890	76.48	1876800	72.70	57.55
7	3463514	81.24	1767900	68.48	51.04
8	3875363	90.90	1948600	75.48	50.28
9	4697274	110.17	2152900	83.40	45.83
1940	4444093	104.23	2865900	111.02	64.49
<u>Lambs (Carcasses)</u>					
1931	8197552	100	7819980	100	95.39
2	8827638	107.69	7574147	96.86	85.80
3	9853393	120.21	9056071	115.81	91.90
4	8825422	107.66	8719301	111.50	98.80
5	9765626	119.13	9383081	119.99	96.08
6	8755005	106.80	8216600	105.07	93.85
7	9457755	114.15	8732800	111.67	93.32
8	10016372	122.19	9201500	111.67	91.86
9	9973413	121.66	9331700	119.33	93.57
1940	10140034	123.70	10323300	132.01	101.81
<u>Beef (Carcasses)</u>					
1931	334771	100	66188	100	19.77
2	330479	98.72	59329	89.64	17.95
3	404981	120.97	112048	169.29	21.67
4	488404	145.89	159318	240.71	32.62
5	502563	150.12	168223	254.16	33.47
6	576758	172.28	178900	270.29	31.02
7	516069	154.16	150800	227.84	29.22
8	596596	178.21	197200	297.94	33.05
9	594456	177.57	213900	323.17	35.98
1940	599746	179.15	200200	302.47	33.38
<u>Veal (Carcasses)</u>					
1931	559206	100	83582	100	14.95
2	607587	108.65	117420	140.48	19.33
3	613873	109.78	91341	109.28	14.88
4	954410	170.67	124092	160.43	14.05
5	762757	136.40	71356	85.37	9.36
6	1086231	194.25	110082	131.71	10.13
7	1054507	188.57	120592	144.28	11.44
8	1086365	194.27	149328	178.66	13.75
9	1019831	182.37	140103	167.62	13.72
1940	1060995	189.73	189021	226.15	17.82
<u>Pigs (Carcasses)</u>					
1931	501670	100	150024	100	29.90
2	482450	96.17	104889	69.91	21.74
3	590607	117.73	186646	124.41	31.60
4	800067	159.48	378760	252.47	47.34
5	973525	194.06	451825	301.17	46.41
6	1041730	207.65	674000	419.26	64.70
7	1106466	220.56	663000	441.93	59.92
8	1122531	223.76	678000	451.93	60.40
9	1043664	208.04	630000	419.93	60.36
1940	827604	164.97	483000	321.95	58.36

Sources:- 1936 Year Book, PP.360,361,363; 1941 Year Book, PP.402,403,404;

Index Nos. and Percentages have been calculated.

See also G.108.

TABLE 84.  
CAPITAL AND UNIMPROVED VALUES OF LAND.

Year.	Unimproved Value.	Capital Value.
1929	£ 344,757,796	£ 655,906,887
30	338,887,411	664,571,181
1	331,634,774	667,911,212
2	321,798,700	662,829,264
3	314,556,174	653,707,517
4	309,770,390	650,362,355
5	301,137,513	637,604,203
6	295,695,574	635,801,798
7	289,844,804	632,229,720
8	282,326,015	636,362,641
9	282,806,212	652,898,894
1940	278,880,855	660,524,008.

Source: 1942 Year Book, P.538.  
See also G.109.

TABLE 85.  
TOPDRESSING OF PASTURE LAND.

Year.	Area Topdressed.			Total Area.	
	With Art- ificial Fert- ilizer only.	With Lime Only.	With both Lime and A/P.	Area.	Index Nos.
30-31	Na	Na	Na	2871316	100.00
1- 2	Na	Na	Na	2454321	85.48
2- 3	1741035	102952	594127	2438114	84.91
3- 4	1468537	116234	663399	2249170	78.33
4- 5	1703325	145986	834803	2684114	93.48
5- 6	1798714	150585	932585	2881884	100.37
6- 7	2122386	176763	1027130	3326279	115.84
7- 8	2516236	188953	1168800	3873989	134.92
8- 9	2584618	218445	1213881	4016944	139.90
1939-1940	2764295	204478	1218511	4187284	145.83

1938 Year Book, P.398; 1941 Year Book, P.383.

Source:

Index Nos. have been calculated.

See Also G.107.

TABLE 86.  
FARM MACHINERY (Index Nos.)

Year.	Milking Plants.	Cream Seperators.	Shearing Plants.	Tractors.	Electric Motors.	Int.Comb. Engines.
1930	100.00	100.00	100.00	100.00	100.00	100.00
1	110.44	97.54	110.78	129.09	136.85	115.48
2	113.75	106.28	106.20	124.80	146.84	109.42
3	119.27	112.21	107.33	127.78	162.60	113.03
4	123.33	115.16	106.76	130.09	177.22	113.51
5	125.54	115.77	110.55	137.47	192.26	115.38
6	128.24	116.35	114.52	146.75	215.28	115.60
7	133.87	117.70	119.92	169.23	244.29	116.64
8	138.09	117.06	130.91	206.40	280.14	117.76
1939	141.90	115.24	136.11	247.72	312.01	117.90
1940	144.81	115.47	143.81	289.84	343.41	121.79

Source: Index Nos. calculated From Figures supplied in the section on farming in each of the Year Books.

TABLE 87.

## FARM PRODUCE: EXPORTS &amp; DOMESTIC CONSUMPTION.

Av. of 3 Yrs.	Ag. Prod.		Past Prod.		Dairy etc. Prod.		Total Farm Prod.	
	%	%	%	%	%	%	%	%
	Export.	N.Z. Con.	Export.	N.Z. Con.	Export.	N.Z. Con.	Export.	N.Z. Con.
1929-31	10	90	75	25	67	33	63	37
1930-32	10	90	74	26	68	32	62	38
1931-33	12	88	74	26	68	32	61	39
1932-34	12	88	80	20	72	28	65	35
1933-35	12	88	79	21	72	28	66	34
1934-36	12	88	81	19	73	27	69	31
1935-37	10	90	82	18	73	27	70	30
1936-38	11	89	81	19	73	27	70	30
1937-39	11	89	81	19	72	28	70	30
1938-40	10	90	82	18	71	29	69	31

Source: 1942 Year Book, P.329.

TABLE 88.

## GUARANTEED PRICES. - F.O.B., per lb.

Grading:	Season.			
	1936-37.	7-8.	8-9.	9-0.
Creamery Butter:				
Finest.				
94 points.				
8 over.	12.6875	13.785	15.015	15.015
93 - 93½	12.5625	13.66	14.89	14.89
First:				
92 - 92½ pts.	12.5	13.5975	14.8275	14.8275
90 - 91½ pts.	12.3125	12.41	14.64	14.64
Second.	11.8125	12.91	14.14	14.14
Whey Butter:				
First:	11.5625	12.66	13.89	13.89
Second:	11.0265	12.16	13.39	13.39
Cheese:				
Finest:				
94 pts. and over.	6.96875	7.90625	8.57625	8.57625
93 pts. to 93½.	6.9375	7.875	8.545	8.54
First:				
92 - 92½.	6.8125	7.75	8.42	8.42
91 - 91½.	6.75	7.6875	8.3575	8.3575
Second:	6.5625	7.50	8.17	8.17

Source: 1941 Year Book, P.356.

TABLE 89.  
OUTPUT OF TIMBER (Board feet)

Years ended 31/3	Private Output.	State Output.	Total Output.	Private Output as % of Total	State Output as % of Total
1931	187349998	42118024	229468022	81.64	18.36
2	141952510	12240000	154192510	92.06	7.94
3	133954456	32314954	166269410	80.56	19.44
4	148628598	49026302	197654900	75.19	24.81
5	178478975	65302700	243781675	73.21	26.79
6	190855513	102219800	293075313	65.12	34.88
7	198459818	107429600	305889418	64.87	35.13
8	219424336	103341450	322765786	67.98	32.02
9	226423282	90292700	316715882	71.49	28.51
1940	258618300	77372700	335991000	76.97	23.03

Sources: 1936 Year Book, PP.372,373; 1941 Year Book, PP.415,416;  
1942 Year Book, P.369.

Percentages have been calculated.

See also G.110.

TABLE 90.

See Table 21 and G.39.

TABLE 91.

COMMERCIAL AFFORESTATION: ASSETS & LIABILITIES.

Year ended 31/3.	Assets/Liabilities.
1930	2747422
1	2747939
2	2762050
3	3156788
4	3247458
5	4622797
6	4872923
7	5075215
8	5391743
9	9107252
1940	8606048

Sources: 1936 Year Book, P.376; 1941 Year Book, P.419;  
1942 Year Book, P.374.

See also G.111.

TABLE 92.

COMMERCIAL AFFORESTATION: RECEIPTS & PAYMENTS.

Years ended 31/3.	Receipts.	Payments.	Balance.
1930	838180	841522	- 3342
1	841488	785223	+ 56265
2	627460	640593	- 13133
3	612341	591160	+ 21181
4	970441	1017220	- 46779
5	824374	754729	+ 69645
6	965236	950834	+ 14402
7	895831	1058804	- 162973
8	978288	951398	+ 26890
9	640633	635816	+ 13817
1940	248030	206285	+ 41745

Sources: 1936 Year Book, P.377; 1941 Year Book, P.420;  
1942 Year Book, P.374, 375.

See also G.112.

TABLE 93

## FISHING.

Year ended Mar. 31	Vessels			Fishermen & Others, but not retailers.		
	Whole Time	Part Time	Total	Whole Time	Part Time	Total
1930	760	1075	1835	2149	892	3041
31	862	795	1657	2177	915	3092
32	804	750	1554	1955	1080	3035
33	824	847	1672	2034	975	3009
34	737	953	1690	1915	1232	3147
35	876	767	1643	2109	954	3063
36	723	623	1346	1998	972	2970
37	693	579	1272	1646	834	2480
38	400	837	1237	1267	1242	2509
39	325	971	1296	1162	1458	2620
1940	303	991	1294	1181	1460	2641

Sources: The Year Books; e.g. 1941 Year Book, P.423.  
See Also Gs 113, 114.

TABLE 94

## GOLD &amp; SILVER MINING ETC.

Year.	Production of Gold and Silver.			No. of Persons engaged	No. of Productive Mines, Claims and Dredges.
	Quantity oz.	Value £	London price per oz. of Gold in £N.Z.		
1930	639795	550978	£4: 8: 0	1539	335
31	564871	657189	£5:17:0	1870	763
32	729146	1019814	£6: 9: 0	3636	1960
33	592247	1099579	£7:16: 0	6212	2468
34	542863	1195840	£8:12: 0	6520	4442
35	603244	1300046	£8:17: 0	1715	4500
36	597548	1272587	£8:15: 0	5161	3026
37	612468	1319743	£8:15: 0	3877	2852
38	509759	1214054	£8:17: 0	2955	1171
1939	569297	1566977	£9:14: 0	2754	859

Sources: The Year Books; e.g. 1941 Year Book, P.429.  
See also Gs 115, 116.

TABLE 95

## COAL MINING

Year	Output.	Persons Employed above & below ground.	Tons Raised per person employed underground.
1930	2562092	5887	574
1	2157756	5745	498
2	1842022	4636	545
3	1821258	4386	570
4	2060315	4478	634
5	2115184	4231	681
6	2140217	4257	678
7	2277799	4417	693
8	2222088	4563	659
9	2342639	4762	661
1940	2516099	5046	668

Sources: 1941 Year Book, P.433; 1942 Year Book, P.386.  
See also Gs 117, 118, 119.

TABLE 96  
STONE PRODUCTION

Years.	No. of Quarries.	No. of Workers.	Output of Stone (tons)								Value of Output.		
			Road & Ballast Stone.	Stone for Harbour Works.	Building & Monument Stone.	Lime-stone for Agriculture.	Lime-stone for Cement.	Miscellaneous.	Total Output.	Output per Worker.	Value at Quarry.	Value per ton.	Value per Worker.
1930	318	1958	1107033	126649	3696	204811	299848	31204	1773241	905.64	413291	£0.2331	£211.1047
1	318	1995	871681	120492	12132	171159	226247	4578	1406289	704.91	316366	0.2250	158.6048
2	332	1888	714732	86240	884	201735	151100	5020	1159711	614.25	241920	0.2086	128.1326
3	319	1711	621923	58734	1994	191888	137039	17821	1029399	601.64	196481	0.1909	114.8531
4	327	1818	7741428	67241	31500	261940	168662	15014	1285785	707.25	261637	0.2035	143.9254
5	358	2002	985446	70357	26166	288559	182944	55920	1609392	803.89	289274	0.1797	144.5903
6	393	1981	941870	49079	22818	317055	241017	80639	1652478	834.16	342861	0.2075	173.0882
7	378	2117	1156876	52246	35731	410770	268190	64708	1988521	939.31	444837	0.2237	210.1236
8	429	2667	1443525	55173	25339	481712	332455	180263	2518467	944.31	555295	0.2205	208.2204
9	420	2083	1491411	57749	13093	391069	398559	75828	2427709	1165.49	545533	0.2247	261.8856
1940	367	1952	1228950	106560	10615	593995	404386	88482	2432988	1246.41	540820	0.2223	277.0769
Index Numbers.													
1930	100	100	100	100	100	100	100	100	100	100	100	100	100
1	101.89	78.74	95.14	328.25	83.57	75.45	14.67	79.31	77.84	76.55	96.53	75.13	
2	96.42	64.56	68.09	23.92	98.50	50.39	16.09	65.40	67.82	58.54	89.49	60.70	
3	87.39	56.18	46.38	53.95	93.69	45.70	57.11	58.05	66.43	47.54	81.90	54.51	
4	92.85	66.97	53.09	852.27	127.89	56.25	48.12	72.51	78.09	63.31	87.30	68.18	
5	102.25	89.02	55.55	707.95	140.89	61.01	179.21	90.76	88.76	69.99	77.09	68.49	
6	101.17	85.08	38.75	617.37	154.80	80.38	258.43	93.19	92.11	82.96	89.02	81.99	
7	108.12	104.50	41.25	966.75	200.56	89.44	207.37	112.14	103.72	107.63	95.97	99.54	
8	136.21	130.40	43.56	685.58	235.20	110.87	577.69	142.03	104.27	134.36	94.59	98.63	
9	106.38	134.72	45.60	354.28	190.94	132.92	243.01	136.91	128.69	132.00	96.40	124.05	
1940	99.69	111.01	84.14	287.20	290.02	134.86	283.56	137.21	137.63	130.86	95.67	131.25	

Sources: The Year Books, e.g. 1941 Year Book, P.437.

Index Nos. have been calculated.

See Also Gs 120, 121, 122, 123, 124.

TABLE 97

## NUMBER OF INDUSTRIAL ESTABLISHMENTS

Industries	1929/30	31	2	3	4	5	6	7	8	9	1939/40
<u>I Consumers' Goods.</u>											
<u>A. Food.</u>											
Meat Freezing etc.	40	40	35	36	35	38	38	38	38	38	39
Butter, Cheese etc.	491	482	480	478	482	485	469	469	438	429	424
Biscuits etc.	59	60	57	58	57	57	60	60	52	55	53
Brewing etc.	51	51	50	50	50	48	49	49	49	50	48
Total.	641	633	622	622	624	628	616	616	577	572	564
<u>B. Clothing.</u>											
Clothing.	237	237	244	254	249	290	318	336	357	380	384
Boots & Shoes.	71	72	69	70	71	76	75	71	70	69	71
Hosiery.	24	26	26	32	32	33	33	35	35	36	36
Woollen Milling.	12	10	10	10	12	12	12	12	12	12	12
Total.	344	345	349	366	364	411	438	454	474	497	503
<u>C. Services.</u>											
Gas.	46	46	46	46	46	46	46	46	46	45	44
Electricity.	97	101	100	100	99	98	99	98	98	99	100
Printing etc.	350	358	355	362	366	373	384	381	370	373	366
Total.	493	505	501	508	511	517	529	525	514	517	510
Total, Consumers' Goods.	1478	1483	1472	1496	1499	1556	1583	1595	1565	1586	1577
<u>II Producers' Goods.</u>											
<u>A. Building.</u>											
Woodware & Turnery.	137	130	125	117	114	130	145	159	162	158	164
Sawmilling, Sashes, Doors.	390	401	345	355	422	438	448	467	474	444	461
Lime & Cement.	31	40	43	45	45	50	57	60	64	66	66
Bricks, Tiles, Pottery.	66	61	50	44	43	54	58	62	60	60	60
Conc. Pipes, Blocks, F.P.	75	82	63	61	67	68	77	94	112	121	146
Furniture etc.	334	335	308	299	281	285	308	338	381	414	436
Total.	1033	1049	934	921	972	1025	1093	1180	1253	1263	1333
<u>B. Engineering.</u>											
Tin Plate & Sheet Metal	132	127	124	125	126	130	127	128	126	133	135
Engineering etc.	250	246	245	235	225	237	246	250	254	266	291
Electrical Eng.	32	36	44	48	49	53	69	74	84	97	112
Dairy etc. Mach.	31	32	32	37	37	44	46	54	57	60	61
Coachbuilding etc.	1060	1090	1049	1042	1024	1077	1150	1218	1307	1390	1395
Total.	1505	1531	1494	1487	1461	1541	1638	1724	1828	1946	1994
Total, Prod. Goods.	2538	2580	2428	2408	2433	2566	2731	2804	3081	3209	3322
Total Major Inds.	4016	4063	3900	3904	3932	4122	4314	4399	4646	4795	4904
Total, All Inds.	5168	5194	4969	4993	5028	5270	5536	5728	5924	6146	6342

Source: The Statistical Reports on Factory and Building Production.  
See also G.125.

TABLE 98.

## TYPES OF ORGANISATION ENGAGED IN FACTORY PRODUCTION.

Types of organisation.		% Incr- eases.	31:3:32	33	34	35	36	37	38	39	40
Individuals	( No. of Est.		1,690	1,721	1,718	1,811	1,909	1,915	1,959	1,989	1,983
	( Persons Eng.	27%	7,241	7,156	7,458	8,407	9,113	9,805	9,945	9,310	9,225
	( Inputs.		1,207,233	1,144,515	1,324,149	1,465,847	1,709,398	1,983,420	2,097,713	2,120,916	2,230,193
	( Outputs.	64%	2,975,610	2,728,155	3,047,356	3,361,475	3,827,037	4,455,281	4,752,735	4,703,036	4,880,859
Partnerships.	( No. of Est.		671	645	643	670	671	686	709	721	744
	( Persons Eng.	30%	3,782	3,785	3,786	4,178	4,402	4,735	4,787	4,741	4,919
	( Inputs.		624,426	643,567	689,873	701,102	768,119	815,147	877,462	976,012	1,087,102
	( Outputs.	71%	1,570,876	1,550,690	1,586,706	1,706,888	1,869,563	2,124,795	2,312,572	2,426,830	2,692,067
Public Reg. Cas.	( No. of Est.		481	476	465	463	501	521	561	602	623
	( Persons Eng.	49%	22,001	21,452	22,599	23,918	25,750	28,057	29,518	30,161	32,799
	( Inputs.		12,405,017	12,469,119	13,806,210	16,325,222	16,753,021	19,635,493	20,696,453	20,771,774	23,438,065
	( Outputs.	81%	21,787,498	21,391,969	23,457,856	26,377,801	27,688,386	31,964,849	34,102,132	34,537,168	39,341,391
Private Reg. Cas.	( No. of Est.		1,534	1,560	1,599	1,730	1,856	1,994	2,102	2,242	2,396
	( Persons Eng.	86%	28,069	28,890	30,608	35,308	39,264	44,955	48,925	48,657	52,162
	( Inputs.		10,064,175	10,829,909	12,154,101	14,606,210	16,525,519	20,414,976	21,051,528	20,901,836	24,448,167
	( Outputs.	130%	19,103,884	19,890,674	21,502,212	25,647,458	28,978,462	35,731,455	37,921,897	37,941,489	43,906,576
Municipal & I. of Undertak- ings.	( No. of Est.		134	134	135	137	139	145	145	153	157
	( Persons Eng.	49%	3,599	3,461	3,317	3,803	3,974	4,376	4,659	5,080	5,354
	( Inputs.		3,891,650	4,085,079	3,838,287	3,970,088	4,064,990	4,369,721	4,660,121	5,403,141	6,079,837
	( Outputs.	61%	4,948,455	5,094,461	4,903,165	5,198,839	5,466,042	5,818,355	6,446,404	7,142,888	7,974,257
Co-op. & Miscellan.	( No. of Est.		459	457	468	459	460	467	448	439	439
	( Persons Eng.	6.5	4,005	4,117	4,883	3,744	4,115	4,473	4,4510	4,386	4,263
	( Inputs.		14,150,577	13,428,301	15,106,573	15,016,272	20,119,346	23,449,318	25,700,896	25,170,502	27,658,043
	( Outputs.	74%	17,427,071	17,482,115	17,273,577	17,032,012	22,185,258	25,846,987	28,155,816	27,696,015	30,266,676
Totals.	( No. of Est.		4,969	4,993	5,028	5,270	5,536	5,728	5,924	6,146	6,342
	( Persons Eng.	58	68,697	68,921	72,651	79,358	86,588	96,401	102,344	102,535	108,722
	( Inputs.		42,343,078	42,600,490	46,919,193	52,084,741	59,940,393	70,668,075	75,084,173	75,344,181	84,941,407
	( Outputs.	90%	67,813,394	68,138,064	71,770,872	79,324,473	90,014,748	105,941,722	113,691,556	114,447,426	129,061,826



TABLE 99  
NO. 8 CAPITAL OF INDUSTRIAL JOINT STOCK COMPANIES

Year.	No. of Cos.	Subscribed Capital.	Paid up Capital	% Paid up to total cap.	Loan Capital	% of loan cap. to Total Cap.	Total Cap. (Loan & Paid up.)
<u>Private Cos.</u>							
1929-30	1400	13981437	12888127	81.00	3022388	19.00	15910515
31	1447	13953265	12843080	82.17	2787231	17.83	15630311
32	1452	13676981	12669244	82.08	2765616	17.92	15434860
33	1475	13618302	12783439	80.76	3046417	19.24	15829856
34	1504	13339437	12481897	81.23	2883666	18.77	15365563
35	1584	14135008	13238878	80.95	3116480	19.05	16355358
36	1700	14551380	13715659	80.83	3252319	19.17	16967978
37	1787	15842230	15010565	74.78	5062191	25.22	20072756
38	1950	15814823	15259334	73.73	5438042	26.27	20697376
39	2009	16046821	15461124	72.17	5962711	27.83	21423835
40	2123	16650339	16114520	72.01	6263731	27.99	22378251
<u>Public &amp; Co-operative Cos.</u>							
1929-30	746	25835557	23092851	78.96	6151859	21.04	29244710
31	728	25873180	23074214	80.17	5706587	19.83	28780801
32	715	25227369	22699824	80.58	5471223	19.42	28171047
33	717	26107748	23660339	80.83	5611456	19.17	29171795
34	718	26017979	23519472	80.71	5619780	19.29	29139252
35	710	24928931	22170229	79.56	5694913	20.44	27865142
36	722	25073948	22432540	82.13	4880223	17.87	27312763
37	738	245192117	22151479	75.83	7061984	24.17	29213463
38	742	26740741	24063294	74.72	8139782	25.28	32203076
39	762	27903925	25242709	75.08	8377016	24.92	33619725
40	758	28535986	26417769	75.83	8421601	24.17	34839370
<u>Total (Public, Co-operative &amp; Private Cos.)</u>							
1929-30	2146	39816994	35980978	79.68	9174247	20.32	45155225
31	2175	39826445	35917294	80.87	8493818	19.13	44411112
32	2167	38904350	35369068	81.11	8236839	18.89	43605907
33	2192	39726050	36443778	80.80	8657873	19.20	45101651
34	2222	39357416	36001369	80.89	8503446	19.11	44504815
35	2294	39063939	35409107	80.07	8811393	19.93	44220500
36	2422	39625328	36148199	81.63	8132542	18.37	44280741
37	2525	40361447	37162044	75.40	12124175	24.60	49286219
38	2692	42555564	39322628	74.33	13577824	25.67	52900452
39	2771	43950746	40703833	73.95	14339727	26.05	55043560
40	2881	45186325	42532289	74.33	14685332	25.67	57217621

Source: The Statistical Reports on Factory and Building Production.  
See also Gs 132, 133, 134.

**TABLE 100.**  
**INDUSTRIAL EMPLOYMENT.**

Type of Industry.	1929/30	1930/31	1931/32	1932/33	1933/34	1934/35	1935/36	1936/37	1937/38	1938/39	1939/40
<b>CONSUMER'S GOODS.</b>											
<b>(A) Food.</b>											
Meat Freezing etc.	6139	5891	6060	6365	7653	7594	7692	7665	7835	7897	8282
Butter, Cheese, etc.	4228	4184	3991	4137	4346	3787	4062	4318	4128	3944	3859
Biscuits etc.	2719	2716	2523	2512	2738	2591	2862	3127	3208	3190	3496
Brewing etc.	987	952	870	810	807	847	918	1036	1155	1241	1215
Total.	14073	13743	13444	13824	15544	14819	15534	16146	16316	16272	16852
<b>(B) Clothing.</b>											
Clothing.	7852	7690	7155	7616	7877	9394	10296	11828	12916	12270	13201
Boots and Shoes.	2307	2364	2183	2277	2429	2541	2788	3081	3075	3731	4384
Hosiery.	729	736	714	757	913	998	1012	1226	1298	1257	1259
Woollen Milling.	1478	2237	2216	2349	2466	2532	2632	2792	2748	2406	2980
Total.	13366	13027	12268	12999	13685	15465	16728	18927	20037	19664	21824
<b>(C) Services.</b>											
Gas.	1796	1778	1784	1787	1758	1730	1779	1868	1920	1942	1889
Electricity.	2459	2716	2726	2619	2803	2907	3010	3252	3427	3739	3991
Printing, etc.	8255	8192	7610	7453	7744	8079	7727	7903	8153	8337	8120
Total.	12510	12686	12120	11859	12305	12716	12516	13023	13500	14018	14000
<b>PRODUCER'S GOODS.</b>											
<b>(A) Building Materials.</b>											
Woodware etc.	1112	880	629	601	612	737	933	1072	1150	1278	1504
Sawmilling, etc.	7381	6390	4591	4787	5323	6325	7207	8005	8364	7917	8487
Lime and Cement.	928	912	794	688	631	704	759	953	1050	1123	1195
Bricks, etc.	1156	946	563	405	467	618	777	909	1117	1194	1186
Concrete Pipes, etc.	780	664	367	308	351	431	566	820	950	1003	1185
Furniture etc.	2774	2378	1772	1584	1576	1874	2262	2807	3145	3215	3287
Total.	14131	12170	8723	8373	8960	10689	12504	14566	15776	15730	16844
<b>(B) Engineering Materials.</b>											
Tin Plate etc.	1494	1448	1229	1262	1282	1452	1384	1554	1690	1886	2147
Engineering, etc.	4688	4206	3286	2858	2828	3446	4117	4610	4828	5103	5468
Electrical Engin.	235	265	268	242	244	355	617	598	855	1018	1356
Dairy etc. Machinery.	963	850	505	542	532	689	880	1152	1200	1137	1189
Coachbuilding, etc.	7033	6354	5090	4560	4401	5473	6731	8185	9909	10289	9092
Total.	14413	13122	10378	9464	9287	11415	13729	16099	18482	19433	19252
Total, Production Goods.	28544	25292	19101	17837	18247	22104	26233	30665	34258	35163	36096
Total, Major Inds.	68493	64748	56933	56519	59781	65104	71011	78761	84111	85117	88772
Other Inds.	14368	13166	11764	11502	12870	14254	15577	17640	18233	17418	19950
Total, All Inds.	82861	77914	68697	68021	72651	79358	86588	96401	102344	102535	108722
<b>Index Nos. (Base: 1928/29 = 1000)</b>											
<b>CONSUMER'S GOODS.</b>											
<b>(A) Food.</b>											
Meat Freezing etc.	932	895	916	967	1163	1154	1169	1165	1191	1200	1258
Butter, Cheese, etc.	986	976	931	965	1013	992	1007	1007	963	930	900
Biscuits, etc.	1058	1056	982	977	1065	1008	1113	1217	1248	1241	1360
Brewing, etc.	1002	970	897	836	822	863	935	1056	1177	1267	1238
<b>(B) Clothing.</b>											
Clothing.	1047	1021	954	1015	1050	1252	1547	1577	1722	1636	1760
Boots & Shoes.	1006	1031	952	1002	1059	1108	1216	1355	1340	1341	1627
Hosiery.	1040	1050	1010	1080	1302	1424	1444	1746	1852	1736	2302
Woollen Milling.	985	889	881	937	980	1014	1046	1199	1092	1256	1184
<b>(C) Services.</b>											
Gas.	971	962	965	966	951	936	962	1010	1030	1050	1027
Electricity.	1021	1128	1132	1088	1164	1297	1250	1350	1423	1553	1657
Printing, etc.	992	984	914	896	931	971	928	955	980	1002	975
<b>PRODUCER'S GOODS.</b>											
<b>(A) Building.</b>											
Woodware etc.	1070	847	605	578	589	709	898	1031	1107	1230	1448
Sawmilling, etc.	1035	896	644	671	747	887	1011	1121	1173	1110	1190
Lime & Cement.	1054	1042	907	786	721	805	867	1081	1200	1283	1366
Bricks etc.	938	767	457	328	379	501	630	737	737	906	968
Concrete Pipes etc.	1117	951	526	441	503	617	811	1175	1361	848	1117
Furniture etc.	1025	879	658	586	583	693	834	1038	1163	1189	1215
<b>(B) Engineering.</b>											
Tin Plate etc.	1053	1020	866	889	903	1023	975	1095	1191	1329	1513
Engineering, etc.	1021	916	716	623	616	715	897	1006	1052	1089	1166
Electrical Eng.	1059	1194	1207	1090	1044	1599	2779	2689	3851	4586	6108
Dairy etc. Machinery.	1166	1029	611	656	644	834	1065	1395	1574	1376	1439
Coachbuilding, etc.	1187	1072	859	769	758	923	1135	1381	1672	1736	1534

Sources: Industrial Employment Numbers: The Statistical Reports on Factory and Building Production.

Index Numbers: Mr. W. Rosenberg.

See also Cs 127: 138: 141.

TABLE 101.  
INDUSTRIAL UNIONS.

Years as at 31/12	Employers.			Employees.		
	No. of Unions.	No. of Members.		No. of Unions.	No. of Members.	
		No.	Index Nos.		No.	Index Nos.
1929	137	5929	100	409	102646	100
30	136	5865	99	416	101526	99
1	131	4880	82	405	90526	88
2	127	4254	72	400	79283	77
3	130	3959	67	407	71888	70
4	128	4107	69	404	74391	72
5	131	4344	73	410	80929	79
6	201	6442	109	487	185527	181
7	239	8441	142	499	232986	227
8	248	9131	154	466	249231	243
9	264	9893	167	442	254690	248
1940	267	11169	188	427	24808	242

1932 Year Book, PP.718,719; 1937 Year Book, PP.701,702;

1942 Year Book, PP.708,709.

Index Nos. have been calculated.

See also Gs 128, 129.

TABLE 102  
STRIKES

Years.	No. of Strikes.	No. of Firms Affected.	Workers Involved.		Days Lost.		Wages Lost.	
			No.	Index Nos.	No.	Index Nos.	No.	Index Nos.
1929	46	60	7151	100	25889	100	16940	100
30	38	44	5467	76.45	31669	122.32	37299	138.45
1	23	37	6356	51.13	48486	187.28	44544	165.35
2	23	67	9355	130.82	108605	419.50	105715	392.41
3	15	43	3558	49.76	65099	251.45	59334	220.25
4	24	37	3773	52.76	10393	40.14	7121	26.43
5	12	65	2323	32.48	18563	71.70	15266	56.67
6	43	128	7354	102.84	16980	65.59	12886	47.83
7	52	73	11411	159.57	29916	115.55	32129	119.26
8	72	103	11388	159.25	35456	136.95	42104	156.29
9	66	636	15682	219.30	53801	207.81	60394	224.18
1940	56	99	10475	146.48	28097	108.53	28062	104.17

Source: 1942 Year Book, P.720.

Index Nos. have been calculated.

See also G130.

TABLE 103.  
INDUSTRIAL ACCIDENTS

Year.	Number of Accidents.		No. Per 100,000 man hours worked.
	No.	Index Nos.	
1929	7218	100	2.503
30	7128	98.75	2.557
1	5713	80.26	2.544
2	4730	65.53	2.195
3	5094	70.57	2.391
4	4908	68.00	2.111
5	5587	77.40	2.373
6	7703	106.72	2.683
7	9394	130.14	3.050
8	12553	173.91	3.108
9	14314	198.31	3.173
1940	135.48	187.69	2.933

Sources: 1942 Year Book, P.728; 1937 Year Book, P.727.

Index Nos. have been calculated.

See also G.130.

TABLE 104.  
VALUE AND COST OF INDUSTRIAL PRODUCTION.

Industries.	1929/30	1	2	3	4	5	6	7	8	9	1939/40
Materials.											
CONSUMER'S GOODS.											
(A) Food.											
Meat Freezing etc.	12,922,989	10,656,364	8,466,634	9,119,435	10,889,530	13,909,585	14,455,483	17,218,253	17,713,363	16,837,127	19,070,267
Butter, Cheese, etc.	20,317,533	15,080,881	14,891,506	14,337,534	15,749,984	15,996,918	21,210,486	24,414,057	25,405,727	24,910,171	27,332,138
Biscuits, etc.	819,414	753,831	668,452	592,290	688,635	747,154	875,069	971,387	1,108,743	1,117,960	1,239,200
Brewing etc.	472,304	422,761	300,629	289,095	343,008	421,453	550,453	736,971	918,644	956,926	1,028,531
	34,532,240	26,913,837	24,296,697	24,349,888	27,617,244	30,996,665	36,962,491	43,154,150	44,964,804	43,783,902	48,528,531
(B) Clothing.											
Clothing.	1,391,317	1,319,127	1,044,191	1,212,446	1,366,878	1,566,631	1,581,477	1,849,380	1,899,310	1,846,028	2,160,607
Boots & Shoes.	619,240	550,419	489,846	493,314	541,057	562,287	606,306	735,744	713,709	730,997	960,501
Hosiery.	205,809	192,881	171,535	189,613	204,022	229,911	213,417	306,275	310,281	301,734	495,314
Woolen Milling.	472,486	324,751	261,061	323,610	375,573	460,401	413,089	577,537	603,546	577,985	699,356
	2,688,852	2,387,178	2,366,633	2,218,933	2,487,630	2,815,230	2,814,289	3,468,936	3,534,846	3,256,634	4,323,778
(C) Services.											
Gas.	460,802	479,883	432,649	393,951	378,698	371,910	370,114	397,087	426,651	447,532	490,841
Electricity.	3,611,969	3,750,489	3,716,715	3,922,740	3,700,406	3,798,439	3,878,701	4,157,170	4,430,531	5,134,792	5,811,120
Printing, etc.	1,203,131	1,170,292	980,520	933,163	930,652	963,628	1,076,942	1,179,724	1,354,034	1,466,727	1,518,687
	5,275,902	5,399,671	5,129,884	5,249,854	5,009,763	5,133,977	5,325,757	5,734,951	6,211,216	7,049,051	7,830,648
TOTAL CONSUMER'S GOODS.	42,496,994	34,691,686	31,793,214	31,818,725	35,114,637	38,945,872	45,102,537	52,357,137	54,710,866	54,089,587	60,682,957
PRODUCER'S GOODS.											
(A) Building Materials.											
Woodware etc.	286,896	189,337	114,865	102,943	124,300	155,278	234,383	286,178	335,215	420,254	178,163
Sawmilling etc.	1,234,456	962,240	704,501	659,784	747,256	863,824	1,187,232	1,369,711	1,570,599	1,700,987	1,950,494
Lime & Cement.	190,232	184,966	127,028	101,937	112,300	123,301	153,893	165,991	230,065	251,645	230,406
Bricks, etc.	31,118	26,714	18,387	12,237	14,279	20,435	27,008	35,670	40,571	44,800	47,205
Conc. Pipes, etc.	171,425	131,657	55,789	38,609	70,431	85,792	122,101	177,094	221,617	283,491	358,576
Furniture etc.	598,673	506,804	309,068	262,039	269,214	359,798	490,183	649,241	793,270	818,564	924,328
	2,332,800	1,501,718	1,330,638	1,177,549	1,337,780	1,608,428	2,214,800	2,683,885	3,191,337	3,519,741	3,689,172
(B) Engineering.											
Tin Plate etc.	417,146	388,276	280,204	294,702	344,350	405,105	448,354	580,883	672,617	752,599	943,731
Engineering etc.	845,617	681,994	474,460	407,293	467,644	647,180	853,436	1,010,215	1,247,984	1,320,406	1,369,416
Electrical Eng.	57,347	58,820	58,854	42,797	49,353	75,811	129,442	139,765	227,324	247,390	406,799
Dairy etc. Machin.	423,991	272,999	132,784	158,001	159,017	253,571	340,100	565,141	678,899	691,702	681,606
Coachbuilding etc.	966,266	863,767	717,813	793,292	846,262	1,117,714	1,220,243	1,557,925	1,814,329	2,071,329	1,907,162
	2,711,067	2,265,856	1,664,115	1,696,085	1,866,626	2,499,381	2,991,575	3,853,931	4,441,821	5,013,426	5,308,714
Total Prod. Goods.	5,043,867	3,767,574	2,994,753	2,873,634	3,204,406	4,107,809	5,206,375	6,537,816	7,633,158	8,533,167	8,997,886
Total Select Ind.	47,540,861	38,459,260	34,787,967	34,692,359	38,319,043	43,053,681	50,308,912	58,894,953	62,344,024	62,622,754	69,674,843
All Other Inds.	10,943,384	9,999,096	7,555,111	7,908,141	8,600,150	9,031,060	9,631,481	11,773,122	12,740,149	12,721,427	15,266,564
Total All Ind.	58,484,245	48,458,356	42,343,078	42,600,490	46,919,193	52,084,741	59,940,393	70,668,075	75,084,173	75,344,181	84,941,407
Salaries & Wages.											
CONSUMER'S GOODS.											
(A) Food.											
Meat Freezing etc.	1,570,931	1,623,385	1,553,467	1,549,361	1,511,669	1,535,526	1,634,185	1,865,282	2,188,102	2,379,748	2,637,914
Butter, Cheese, etc.	838,361	914,396	830,179	838,361	837,991	764,640	840,554	1,032,763	1,040,754	1,065,329	1,074,138
Biscuits, etc.	358,422	367,944	315,664	313,210	312,012	273,078	314,717	392,606	428,585	465,506	542,772
Brewing, etc.	273,460	266,017	228,813	208,756	193,782	212,832	230,772	267,951	312,250	348,466	359,540
	3,041,134	3,171,742	2,918,123	2,909,688	2,855,454	2,786,076	3,020,228	3,558,602	3,976,691	4,259,049	4,614,364
(B) Clothing.											
Clothing.	970,017	916,045	784,668	807,206	831,871	952,844	1,025,510	1,322,388	1,542,933	1,568,886	1,818,497
Boots & Shoes.	395,824	383,084	335,415	332,061	336,391	344,504	360,684	438,084	451,246	486,649	641,331
Hosiery.	91,069	91,931	86,305	90,332	95,763	111,551	114,379	146,623	167,975	182,956	155,582
Woolen Milling.	364,542	320,826	300,329	316,352	326,156	345,521	360,782	409,484	422,240	392,393	521,060
	1,821,459	1,719,886	1,506,787	1,545,951	1,590,181	1,754,490	1,861,355	2,312,579	2,584,394	2,630,884	3,136,470
(C) Services.											
Gas.	452,656	438,553	400,018	394,650	384,202	388,331	408,959	451,574	499,303	526,229	538,337
Electricity.	625,332	690,331	666,505	609,311	641,959	670,553	734,249	826,598	929,686	1,032,943	1,120,554
Printing, etc.	1,859,182	1,805,620	1,573,670	1,447,735	1,444,132	1,513,478	1,575,707	1,749,646	1,999,062	2,003,932	1,986,977
	2,937,170	2,934,504	2,640,272	2,451,696	2,470,293	2,572,362	2,718,915	3,027,818	3,318,051	3,562,204	3,645,868
Total Con. Goods.	7,799,763	7,826,132	7,075,183	6,907,335	6,915,928	7,102,928	7,600,498	8,898,999	9,889,136	10,452,137	11,396,702
PRODUCER'S GOODS.											
(A) Building Material.											
Woodware etc.	234,650	179,445	110,846	97,299	99,828	124,768	166,286	214,536	249,409	295,745	395,532
Sawmilling etc.	1,659,019	1,368,563	820,163	796,965	859,472	1,085,549	1,320,843	1,669,597	1,936,901	1,948,849	2,174,719
Lime & Cement.	222,831	205,414	164,665	134,842	130,675	144,617	165,592	212,657	266,756	298,969	317,777
Bricks, etc.	248,429	213,895	102,694	74,167	82,664	111,988	142,242	190,038	200,835	250,968	288,462
Conc. Pipes etc.	168,296	132,400	60,821	51,580	58,932	73,785	100,273	166,766	213,659	238,430	296,233
Furniture etc.	541,235	451,376	285,649	236,160	233,300	285,081	376,261	528,567	626,628	675,134	712,772
	2,974,460	2,551,093	1,544,838	1,391,713	1,464,471	1,829,788	2,271,497	2,982,161	3,494,188	3,708,095	4,185,495
(B) Engineering.											
Tin Plate etc.	285,868	273,647	206,15,1								

TABLE 105

## INDEX OF VOLUME OF INDUSTRIAL PRODUCTION

Base: 1928-29 = 1000

INDUSTRIES	1929/30	1931	1932	1933	1934	1935	1936	1937	1938	1939	1939/40
<u>I. CONSUMERS' GOODS.</u>											
<u>A. FOOD.</u>											
Meat Freezing etc.	998	1089	1194	1293	1231	1348	1351	1400	1422	1481	1642
Butter, Cheese etc.	1097	1125	1154	1367	1472	1410	1457	1525	1435	1307	1418
Biscuits etc.	996	988	808	815	977	982	1075	1231	1302	1358	1531
Brewing etc.	1005	899	764	688	640	827	898	1060	1288	1359	1391
<u>B. CLOTHING.</u>											
Clothing.	884	722	766	929	1035	1243	1170	1465	1600	1502	1701
Boots & Shoes	1104	1107	1047	1211	1278	1384	1489	1645	1574	1626	2021
Hosiery.	1143	1440	1445	1718	1818	1710	1963	2385	1965	2500	3920
Woollen Milling	888	778	856	1015	1037	1036	1088	1220	1094	947	1419
<u>C. SERVICES.</u>											
Gas.	1028	1043	982	951	936	938	959	987	1024	1051	1100
Electricity	1192	1278	1323	1397	1442	1539	1734	1919	2104	2375	2741
Printing etc.	1155	1101	935	883	907	1000	1117	1252	1407	1438	1315
<u>II. PRODUCERS' GOODS.</u>											
<u>A. BUILDING.</u>											
Woodware & Turnery	1148	751	514	435	510	617	923	1096	1180	1408	1797
Sawmilling, Sashes, Doors.	1046	872	574	582	661	795	876	1041	1091	1091	1124
Lime & Cement.	1058	1000	716	579	641	674	788	1000	1157	1370	1407
Bricks, Tiles, Pottery.	905	725	355	218	276	419	543	561	614	773	834
Conc. Pipes, Blocks, F.P.	1186	926	392	267	449	548	790	1148	1405	1767	2214
Furniture etc.	1031	890	568	495	491	642	881	1155	1302	1312	1489
<u>B. ENGINEERING.</u>											
Tin Plate & Sheet Metal	1176	1074	824	985	938	1072	1169	1424	1315	1479	2010
Engineering etc.	1066	863	602	498	588	823	1075	1186	1442	1472	1527
Electrical Eng.	1031	996	967	825	978	1439	2498	2749	3964	4484	7735
Dairy etc. Mach.	1030	655	319	385	350	558	756	1246	1273	1241	1246
Coachbuilding etc.	1101	975	813	912	867	1169	1285	1627	1630	1795	1713

Source: Mr. W. Rosenberg, University of Canterbury.  
See also G142.



TABLE 106

## INDEX OF INDUSTRIAL PRODUCTIVITY

INDUSTRIES	1929/30	1931	1932	1933	1934	1935	1936	1937	1938	1939	1939/40
<u>I. CONSUMERS' GOODS.</u>											
<u>A. FOOD.</u>											
Meat Freezing etc.	1071	1216	1303	1337	1058	1168	1157	1202	1194	1234	1305
Butter, Cheese etc.	1112	1152	1239	1416	1453	1421	1538	1514	1490	1420	1575
Biscuits etc.	941	936	823	834	917	984	966	1018	1043	1094	1126
Brewing etc.	1000	927	852	823	839	958	960	1004	1094	1077	1124
<u>B. CLOTHING</u>											
Clothing.	844	703	802	915	986	993	756	929	929	918	966
Boots & Shoes.	1097	1074	1100	1209	1217	1249	1225	1214	1175	1213	1242
Hosiery.	1229	1371	1430	1591	1397	1200	1359	1370	1061	1392	1703
Woollen Milling.	902	875	972	1086	1058	1022	1040	1109	1002	990	1198
<u>C. SERVICES.</u>											
Gas.											
Electricity.	1058	1084	1018	984	984	1002	997	977	994	1000	1076
Printing etc.	1167	1133	1168	1284	1239	1275	1387	1421	1478	1524	1654
	1164	1118	1023	985	974	1029	1203	1317	1431	1435	1348
<u>II. PRODUCERS' GOODS.</u>											
<u>A. BUILDING.</u>											
Woodware & Turnery.	1073	887	849	753	866	870	1028	1062	1066	1145	1141
Sawmilling, Sashes, Doors.	1011	973	891	867	885	896	961	927	930	983	945
Lime & Cement.	1000	960	789	737	889	837	909	918	964	1068	1030
Bricks, Tiles, Pottery.	965	945	777	665	728	836	862	761	833	853	862
Conc. Pipes, Blocks, F.P.	1062	974	745	605	893	888	974	977	1032	2083	1982
Furniture etc.	1006	1013	872	845	842	926	1054	1113	1120	1103	1226
<u>B. ENGINEERING.</u>											
Tin Plate & Sheet Metal.	1117	1053	952	1107	1039	1048	1198	1300	1104	1113	1328
Engineering etc.	1044	942	840	799	954	1151	1198	1179	1371	1352	1310
Electrical Eng.	973	834	799	757	890	900	900	1022	1029	978	1267
Dairy etc. Mach.	883	657	522	587	544	669	710	792	809	902	866
Coachbuilding etc.	927	935	946	1185	1146	1266	1131	1177	975	1033	1117

Source: Mr. W. Rosenberg, University of Canterbury.  
See also G143.

TABLE 107

## OUTPUT OF SOME BUILDING MATERIALS

Year	Bricks		Corrugated Iron		Channel & Girder Iron	
	Millions	Index Nos.	(000) cwt.	Index Nos.	(000) cwt.	Index Nos.
1930	44.5	100	353.1	100	171.4	100
31	12.7	27.35	206.6	58.51	82.2	47.96
32	9.2	20.67	192.8	54.60	25.1	14.64
33	12.7	28.54	200.1	56.67	28.1	16.39
34	23.4	52.58	273.4	77.43	85.0	49.59
35	29.6	66.52	327.0	92.61	99.8	58.23
36	31.8	71.46	424.7	120.28	112.7	65.75
37	32.4	72.81	408.8	115.78	209.5	122.23
38	36.77	82.47	268.4	76.01	240.8	140.49
1939	38.2	85.84	316.5	89.64	167.9	97.96

Source: 1941 Year Book, P. 470

Index Nos. have been calculated.

See Also Gs. 147, 148, 149.

TABLE 108

## BUILDING ESTABLISHMENTS, EMPLOYEES AND ASSETS

Year.	No. of Establishments.	Total Wage & Salary Earners	Approx. value of Fixed Assets.		
			Land & Buildings.	Tools, Plant & Machinery.	Total Fixed Assets.
1930	1310	11312	£514539	417089	931628
1	1152	9505	440359	404531	844890
2	830	4869	330353	294883	625236
3	821	3922	348214	229301	577515
4	829	4459	334770	815322	550092
5	1319	6852	354425	235510	589935
6	1454	8346	352464	252055	604519
7	1512	9721	363328	257870	621198
8	1522	11471	439570	300552	740122
9	1579	14040	457907	358848	816755
1940	1586	15853	417792	397142	814934

Source: The Statistical Reports on the Factory and Building Production of New Zealand.

See also Gs 144, 146.

TABLE 109.

## CAPITAL EMPLOYED IN BUILDING.

Years ended 31/3.	Paid-Up Share Capital.	Loan Capital.	Total Capital.
1929	2155664	36922	2192586
30	2077428	157124	2234552
1	1889354	91079	1980433
2	1296436	43538	1339974
3	1202783	19101	1221884
4	1390549	58366	1448915
5	1356528	66719	1423247
6	1347389	76134	1423523
7	1334201	126528	1460729
8	1357524	124851	1482375
9	1464262	158166	1622428
1940	1633424	157004	1790428

Source: The Statistical Reports on the Factory and Building Production of New Zealand.

See also G 145.

TABLE 110.  
COST OF BUILDING PRODUCTION.

Years ended 31/3.	Salaries & Wages.	Cost of Materials.	Expenses.	Calculated Profits.	Total Cost of Production.
1930	12665458	6010113	337543	394769	9407881
1	2096420	4600059	307867	212281	7216627
2	920010	1955138	193756	4514	3073418
3	662036	1446857	146373	-27778	2227488
4	712399	1707732	137658	- 4070	2553719
5	1177090	3315018	181561	41787	4715456
6	1536926	4424342	212965	105737	6279959
7	2017824	5620845	274664	220514	8133847
8	2681493	7096722	360497	283518	10422230
9	3532687	8952702	451139	369544	13306072
1940	4180812	10945379	577350	541005	16344546

Source: Statistical Reports on Factory and  
Building Production.

See also G 150.

TABLE 111.  
VALUE OF WORK PERFORMED ON BUILDINGS.

Year.	Buildings.	Bridges, Wharves, Jetties.	Other Construct.	Jobbing & Repairs.	Total.
1930	7,294,729	197,790	280823	1,634,539	9,407,881
1	5,230,024	233,589	289,491	1,463,523	7,216,627
2	1,873,877	92,623	161,816	945,102	3,073,418
3	1,445,628	66,319	36,735	678,806	2,227,488
4	1,730,675	76,686	62,668	683,690	2,553,719
5	3,560,181	110,051	114,052	931,172	4,715,456
6	4,804,374	99,941	164,225	1,211,419	6,279,959
7	6,074,059	115,273	122,163	1,822,352	8,133,847
8	7,848,058	275,778	145,684	2,152,710	10,422,230
9	10,732,964	278,543	240,692	2,053,873	13,306,072
1940	13,260,865	320,755	288,662	2,374,264	16,244,546

Source: Statistical Reports on Factory and  
Building Production.

See also G 151.



TABLE 112.  
VALUE OF BUILDINGS COMPLETED DURING EACH YEAR.

Years ended 31/3.	Private Dwellings.		Business Prem.		Other Buildings.		Total.	
	No.	Value	No.	Value.	No.	Value.	No.	Value.
1930	3868	3,277,283	783	2,365,036	1454	1,148,263	6105	6,790,582
1	2590	2,196,857	457	1,866,388	1088	1,458,777	4135	5,522,022
2	1068	796,703	274	572,855	536	446,112	1878	1,815,670
3	982	590,096	216	525,155	441	291,839	1639	1,407,090
4	1446	869,714	187	394,148	521	291,701	2154	1,555,563
5	2511	1,637,564	322	923,202	838	531,084	3671	3,091,850
6	3548	2,531,642	428	1,046,599	1102	792,794	5078	4,371,035
7	3795	3,033,614	491	1,408,446	1462	978,768	5748	5,420,828
8	4042	3,754,525	500	2,254,462	1515	1,095,466	6057	7,004,453
9	5930	5,930,910	444	1,821,063	2051	1,308,961	8425	9,060,934
1940	6889	7,171,732	344	1,807,162	2594	3,624,501	9827	12,605,395

Source: Statistical Reports on Factory & Building Production.

See also G 152.